Social Policy and Public Opinion: How the Ideological Direction of Spending Influences Public Mood

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This article develops a model of public responsiveness to social policy in the United States, focusing in particular on the public’s ability to distinguish between direct and indirect government spending as means of financing social benefits. We argue that public opinion should be responsive to changes in both direct (appropriations) and indirect (tax expenditures encouraging the private provision of social goals) spending. Further, the public should respond to changes in direct and indirect spending in distinct ways consistent with the divergent resource and interpretive effects of the two types of spending. We find that while public opinion is not responsive to the total amount of federal social spending, it is attentive to changes in direct and indirect spending, considered as separate concepts. The results show that the electorate treats changes in the relative allocation of government spending as representing important shifts in the ideological direction of public policy.

The ability of the mass public to perceive and respond to the actions of policy makers is a cornerstone of representative democracy in the United States.1 Because of this, a substantial body of research works to understand how public opinion responds to policymaking activity. In particular, empirical work has found that public preferences for government spending change in response to the level of appropriations for public social programs (e.g., Soroka and Wlezien 2010; Wlezien 2004). Policy scholars, however, understand the American system of social policy more broadly, as a “divided” system in which the government finances both public programs—through direct spending via budgetary appropriations—and private benefits—through indirect spending otherwise known as “tax expenditures” (Faricy 2011; Hacker 2002).

These two different policy tools, although both treated as “spending” for federal budgetary purposes, represent divergent roles of government in the economy. The American public has recently observed and participated in important debates over the divided social system, on such issues as President Bush’s plan for the “partial privatization” of Social Security (which would replace some direct government spending on income security with government-based incentives for private retirement savings) and Democrats call for a “public option” to compete with private health care insurance plans (with would increase direct government spending on public health, perhaps at the expense of some indirect spending which incentivizes the private provision of health care). These more recent discussions highlight long-standing debates over the proper role of the federal government in facilitating the provision of generally popular social goals such as income security, education, and public health (Hacker 2004; Howard 2007).

The exclusion of indirect spending in empirical work on public responsiveness to government activity is important for two central reasons. First, indirect spending represents the government’s substantial role in subsidizing private-sector social benefits—accounting for close to $600 billion in federal spending in 2009 alone. This is particularly important given that indirect spending plays a far different role in the economy than that of direct spending. Indirect spending does more to

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1An online appendix with supplementary material for this article is available at www.journals.cambridge.org/jop. Data to reproduce the numerical results in this article will be made available at http://dvn.iq.harvard.edu/dvn/dv/CGFaricy on the date of publication.
privilege market over government-based conceptions of power, tends to fund programs that benefit primarily wealthier citizens, and tends to redistribute wealth upward rather than downward. Second, the theoretical focus on direct appropriations implicitly assumes that public reaction to government spending is driven wholly by the amount that government spends in particular social domains, rather than accounting for how that money is spent, or to whom the benefits of government spending accrue.

In this article, we work to develop a more general theory of public opinion and social policy in the United States, encompassing mass responsiveness to both direct and indirect social spending. Considering social policy as deviating paths provides for a broader theoretical understanding of the relationship between public preferences and social policy, allowing us to more closely integrate scholarship which examines dynamic opinion-policy linkages in American politics—in particular, the “thermostat” model of policy responsiveness offered by Wlezien (1995)—with “social spending” policy as understood by scholars of American public policy. We argue that the public has the ability to recognize and respond to changes in both indirect and direct social spending. In addition, we argue that citizens do not and should not respond broadly to “government spending,” defined as the sum total of government expenditures on social programs. Instead, the divergent redistributive and ideological effects of direct versus indirect social policy cause the public to respond to the two conceptions of social spending in opposing ways.

Using novel measures of social spending, we find that increases in indirect social expenditures are treated by the public as conservative public policy and move public preferences in a liberal direction. Direct social appropriations, by contrast, are viewed as liberal policy and tend to make public preferences more conservative. The public does not respond to social spending as an aggregated concept; rather, it treats the two conceptions of social spending as different types of policy tools and adjusts its preferences accordingly. Responsiveness to spending policy is strongest, but not limited to, the most educated portion of the electorate.

The results show that public opinion dynamics are not driven by the total amount of federal government spending, but rather by the relative allocation of social welfare expenditures across direct and indirect means. More generally, the extension of the thermostat logic to indirect social spending also provides an initial step (see also Enns and Kelly 2010) toward more closely linking the rich tradition of work on opinion-policy relationships as conceived by scholars of public opinion, with a fuller understanding of “social policy” as conceived by policy scholars, in a way that could enrich work in both fields (Hacker and Pierson 2009; Mettler and Soss 2004).

**The Two Faces of Social Spending in the United States**

Most empirical research exploring the relationship between public opinion and social policy typically focuses strictly on direct governmental appropriations for social programs. But policy scholars (e.g., Hacker 2002; Howard 1997, 2007) have demonstrated that there are two social systems in the United States: one public and the other private. Social policy, commonly defined, is any government effort to provide economic security to citizens through protection against income loss and the guarantee of a minimum standard of living. In this study, we conceive of social policy in this broader sense, as a choice between these two systems: direct social spending on public social programs versus indirect social expenditures that subsidize the private market.

Direct spending is easily recognizable: it is simply federal spending on social programs that is allocated through the budgetary appropriations process. Indirect spending, or “tax expenditures,” is a measure of the revenue loss to the U.S. Treasury from tax breaks used to incentivize the private provision of social programs. A central purpose of the tax expenditure concept is to allow a side-by-side comparison between programs funded through the tax code and programs financed through the appropriations process (Surrey 1974).

Tax expenditures are considered a component of government spending because this policy instrument targets money to specific populations or activities and has the same effect as direct spending on beneficiaries, and on the budget (Howard 1997; Surrey 1974). For example, a new tax expenditure program for employer-based pensions that cost $100 billion would have a similar effect on the budget deficit as introducing an

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2 In recent decades, there has been substantial growth in the diversity of policy tools used to finance social policy in this broader sense, using both public and private means. There are numerous and varied government tools used to promote policy objectives: appropriations, tax expenditures, grants, regulations, loan guarantees, government corporations, and loans (Hacker 2002; Kettl 1997; Salamon 2002).
expansion of Social Security that also cost $100 billion. Tax expenditure data is a familiar concept in studies of social policy in both American public policy and comparative politics (e.g., Adema and Ladaique 2005; Hacker 2002). The majority of tax expenditures for social policy go towards financing employer-based social benefits such as private health insurance and pensions.

For our purposes, direct social spending can be measured using a familiar and oft-employed method, the appropriations data contained in the Policy Agendas Project. To create a measure of direct social appropriations, we combine total spending from the following budgetary categories: Health; Medicare; Income Security; Education, Training, Employment, and Social Services; Social Security; and Veterans Benefits and Services. To account for inflation and population growth, the measure we use is per-capita spending in constant (2006) dollars.

To quantify indirect social spending, we rely on a new dataset compiled from estimates of tax expenditures from the Joint Committee on Taxation (hereafter JCT). The JCT estimates tax expenditures in terms of revenues lost to the U.S. Treasury for each special tax provision included in the U.S. tax code. A provision has traditionally been listed as a tax expenditure if it departs from the normal income tax structure and it results in more than a de minimis revenue loss ($50 million). Under the JCT methodology, the normal tax structure for an individual includes the following: one personal exemption for each taxpayer and one for each dependent, the standard deduction, the existing tax schedule, and deductions for investment and employee business expenses. Most tax benefits to individual taxpayers can be classified as exceptions to this normal income tax law. Each tax estimate is a function of subtracting two predicted streams of revenues: predicted revenues under the current law from predicted revenue under new and expanded tax provisions.

The tax expenditure data is organized by the JCT in the same budget categories as appropriations spending. Following Faricy (2011), we create measures of indirect social expenditures by combining expenditure estimates from the same budgetary categories as used for direct spending. Again, we adjust this measure for both population size and inflation. Figure 1 graphs the total amount of direct and indirect social spending for the period 1974–2006. Together, these two measures of spending sum to over $2 trillion in 2006. On average, indirect spending represents about 20% of all social spending—although, as we will see, fluctuations around this average are systematic and important. Even after adjusting for inflation, the amount of both direct and indirect social spending has increased substantially over the past 30 years.

The Divergent Consequences of Indirect and Direct spending

Both indirect and direct spending provide ways for the federal government to finance the provision of generally popular social goals—public health, education, income security, and social welfare. But the choice of financing social programs through direct or indirect spending has considerable implications for the distribution of income, the targets of social benefits, and the relationship between government and market power. In addition, indirect and direct spending policy are crafted through different means. More specifically, we identify at least four critical differences between direct and indirect social spending.

First, direct and indirect spending vary in their income redistribution effects. Appropriations

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3Since 1974, the nonpartisan Congressional Joint Committee on Taxation (hereafter the JCT) has annually estimated tax expenditures in terms of revenues lost to the U.S. Treasury for each special tax provision included in the U.S. tax code. The Congressional Budget and Impoundment Act of 1974 (CBA) officially codified tax expenditures and requires that these figures are reported to both Congress and the White House on an annual basis. The JCT and the CBO both report tax expenditure data. We use the more common measurement from the JCT since it has a more consistent methodology over time.

4See www.policyagendas.org and Baumgartner and Jones (2009).

5According to the JCT, these estimates have been excellent predictors of actual changes in government tax receipts as calculated by I.R.S. returns.

6Although tax expenditure data is nominally available going back to 1967, we restrict the analysis to the 1974-and-beyond period because 1974 was the first year in which the collection and use of tax expenditure data was officially routinized by the Joint Committee on Taxation (as a function of the Congressional Budget and Impoundment Act of 1974). The Joint Committee on Taxation experimented with slightly different calculations from 1967–72, using varying assumptions for determining the standard baseline income, but settled on a baseline equation that has been used since 1974 report.

7It is well known, for example, that social programs of the sort financed through direct and indirect spending are quite popular in the electorate. When faced with the basic question of whether government should spend more or spend less on education, social security, and public health for example (the three largest categories of indirect social spending), substantial majorities say government should spend and do more (e.g., Page and Jacobs 2009; Stimson 1999).
spending on social programs progressively redistributes income to poorer citizens through the direct federal provision of services and programs designed to benefit mainly older populations. Kelly (2008), for example, shows that 53% of total Social Security benefits go to citizens in the lowest income quartile, and only 23% goes to the top two income quartiles combined. Total public social spending reduces the gini coefficient in the United States by over 12% (Kelly 2008). The majority of tax expenditures, by contrast, have regressive effects on income redistribution (Surry 1974). Since the income tax code is progressive by structure, tax expenditures formulated as deductions or exclusions from that structure generally reduce the progressivity of the tax system. Tax expenditures, in other words, regressively redistribute income by reducing tax rates more for higher marginal rate taxpayers than for lower marginal rate taxpayers.\footnote{Workers enrolled in employment-based health insurance programs, who are the recipients of indirect spending, for example, are more likely to be White, economically secure, and working full time as a professional in a large firm as compared to the average citizen (Purcell 2008). In 2008, according to the Employee Benefits Research Institute (EBRI), roughly 70% of Whites received health insurance through their employer. Conversely, 49% of Blacks had coverage and only 41% of Hispanics had private coverage. In the same year, more than 66% of workers in managerial and professional occupations had personal health care insurance compared with 34% of workers in the service sector. In addition full-time, full-year workers (66%) and workers in firms with 1,000 or more employees (64%), were substantially more likely to receive employer-provided health insurance than part-time workers (34%) or workers in firms with fewer than 10 employees (26%).}

Second, the public and private social systems serve different populations. The beneficiaries of federal programs financed by direct social spending are typically the elderly, the disabled, the unemployed, and the poor. Further, such programs are more likely to serve racial and ethnic minorities as well as single female-headed households. The beneficiaries of indirect spending, by contrast, tend to be wealthier, White, and more likely to be employed in professional occupations than the public at large (Faricy 2011).\footnote{There are notable exceptions such as Medicare Part D funding private companies and tax expenditure programs that make Social Security tax free but the majority of direct expenditures finance public programs while the vast majority of indirect spending is allocated to the private sector.}

Third, direct and indirect spending differ in the power they accord to the private sector. While direct spending explicitly calls for a direct federal role in providing benefits, indirect spending allocates substantially more power to private markets in distributing social benefits (Howard 2007).\footnote{This difference in conceptions of government versus market power fits with the political history of social spending in the United States: Republicans have typically moved to increase the proportion of the federal social budget funded through indirect means, while liberal Democrats have sought to expand the size and proportion of the federal social budget funded by direct appropriations (see Faricy 2011; Ventry 2002).} Rather than directly appropriating funds to provide health insurance, for example, indirect spending uses tax breaks to incentivize private businesses and citizens to provide and purchase health insurance in a market-based system.\footnote{This difference is at or below poverty level and those that do not itemize their personal deductions receive none of this government aid. These and other tax breaks go mainly to those who itemize their income taxes, disproportionately wealthier homeowners (Stanley and McDaniel 1985). For example, the child care credit accrues more average tax savings to families as they move up in income level. In 1999, a family making over $200,000 was given an average credit of $485 while a family earning between $40,000 and 50,000 was allocated only $387 for the same child care credit (Toder, Wasow, and Ettlinger 2002).}
Fourth, indirect and direct spending are also thought to differ in the openness of the respective policymaking processes themselves. The use of indirect spending to finance social programs has been referred to as “hidden,” “a shadow state,” and “subterranean” (Gottschalk 2000; Hacker 2004; Howard 1997). The limited number of congressional committees involved in the policy process of indirect spending along with the lack of annual review provide institutional barriers for the mass electorate to learn, understand, and react to spending changes. Indirect spending provisions are created or expanded in revenue or tax reform bills and not through the annual appropriations process. The Senate Finance and House Ways and Means committees have exclusive jurisdiction over indirect spending bills and serve as both the approving and “appropriating” committees. Direct spending measures, by contrast, must pass through standing committees with jurisdiction over a specialized policy area as well as the Budget and Appropriations committees that fix spending levels for each budget category.

Because the process of policymaking is essentially a “closed” process, there is concern among some policy scholars that citizens will be unable to understand policy changes with respect to indirect spending or responsiveness will be restricted only to a very narrow subset of politically engaged citizens with the capacity to follow the tax expenditure policymaking process and understand its consequences. If the public cannot respond to indirect policymaking activity in a particular realm, it has no basis to judge the actions of policy makers and no way to hold them accountable for their actions—thus potentially opening the door for a greater role for special interests and political elites in shaping policy (Hacker 2002; Mettler 2008).

This discussion suggests that funding social programs via direct or indirect means are distinct policy choices with divergent political and social consequences. The raw amount of both direct and indirect spending has increased over time. But if direct and indirect spending truly represent divergent policy tools with divergent consequences, then what is of consequence when understanding public opinion change is not necessarily the total amount of social spending, but rather the balance between direct and indirect spending.

In this light, Figure 2 displays a ratio of indirect to direct social spending. This measure shows no linear increase; rather, the proportion of social spending that is indirect varies quite a bit, growing to over 25% of direct spending during two time periods during 1982–1987 and 2002–07, and settling as low as 17% in the early 1970’s. This ratio measure perhaps best represents the dynamics of the choice faced by policy makers in considering how to deal with social spending.

A Model of Public Responsiveness to Social Policy

It is clear that the American public lacks the capacity or interest to be deeply informed about the particulars of public policy in many if not most contexts. But there is nevertheless evidence that the public, at least in the aggregate and in some policy domains, is attentive and responsive to the policymaking activity of the federal government. The dominant theoretical framework used to explain mass responsiveness to public policy, particularly mass responsiveness to social policy and direct social spending, is the “thermostatic” model offered by (Wlezien 1995; Soroka and Wlezien 2010).

In essence, this theory provides a model of negative feedback to policy makers, as the public adjusts its relative preferences for government activity in a direction opposite the dominant ideological direction of policymaking. As governmental activity moves public policy in a particular direction, at least some citizens will change their preferences, going from wanting “more” policy change in that direction to wanting no policy change at all, or (if the government overshoots their preferred level of policy) wanting “less.” In the aggregate, this means that public demands for policy to move further in that direction weaken, and public preferences change, to demand less policy change in that direction. When public policy moves in a liberal direction, for example, citizens notice these changes and respond by demanding comparably more conservative policy (and vice versa). The end result is the provision of negative feedback from the aggregate public to policy makers.

The thermostatic model is fairly pervasive, shown to be applicable across many types of policy domains (Wlezien 2000), levels of government (Johnson, Brace, and Arceneaux 2005; Cashore and Howlett 2007), and Western democracies (Jennings 2009). This type of responsiveness is critically important for representative democracy, as it provides strong incentives for elected officials to consider the wishes of citizens when crafting policy (Erikson, Mackuen, and Stimson 2002). The model may at first glance suggest a reasonably sophisticated response on the part of the electorate to changes in the policy environment. But it does not require high levels of sophistication or
public attentiveness to policymaking processes or policy details. At its core, it requires citizens to use fairly simplified pieces of information to update very broad political judgments. The level of political attentiveness necessary for citizens to be able to provide thermostatic feedback in relevant policy domains is generally quite low: a general sense of the direction and magnitude of policy change. It simply requires that citizens, in other words, be at least broadly cognizant of the direction which policy is moving, and be able to react accordingly. As such, we see evidence of this sort of responsiveness not only among political sophisticates, but also among those with lower levels of education or political engagement (Enns and Kellstedt 2008; Ura and Ellis 2008).

This model is most commonly applied to the dynamic relationships between public opinion and direct spending: as government spending increases (or decreases) relative to public demand in a particular area, for example, citizen demands for comparably more (or less) spending in that domain decrease. The focus on direct spending alone, however, obscures a significant portion of federal spending, particularly when it comes to social policy and the provision of social benefits. This view not only misses a significant portion of federal spending, but may also have the effect of overstating (or at least misstating) the public’s ability to respond sensibly to changes in federal policy, particularly given the ostensibly “closed” nature of the indirect spending policymaking process. A fuller view of thermostatic public opinion, in other words, needs to take into account both types of social spending and consider not only the total amount that the federal government spends on social programs, but also the ideological direction of that spending.

Two Types of Social Spending and the Thermostatic Model

Building on the thermostatic model, and drawing from Pierson’s (1993) feedback theory of public responsiveness, we develop a more general model of the dynamic relationship between public preferences and social policy in the United States. We argue three points. First, the same kinds of factors that permit public responsiveness to direct spending will permit responsiveness to indirect spending. Second, differences in the redistributive effects of direct and indirect social policy should lead the public to respond to changes in the two types of spending in opposite ways. Third, and related, because of the ideologically distinct nature of direct and indirect spending, the dynamics of public responsiveness to spending should not be viewed as responsiveness to the total amount of federal social spending (direct plus indirect expenditures), but is instead best conceived as responsiveness to the balance of direct and indirect spending, considered as separate and distinct concepts.

The first of these points is the most straightforward, and the most important: we expect that the thermostatic logic generalizes well to indirect, as well as direct, social policy. The thermostatic model, while widely applicable, is not universal, as there are several policy areas on which scholars find minimal evidence.

12It does not, in addition, assume that citizens have an exact “ideal point” of policy in mind; rather, it simply assumes that some people want policy to move in one ideological direction more strongly than do others (see Wlezien 1995, 982).
of thermostatic public feedback (Wlezien and Soroka 2010). In particular, past research suggests two general conditions that must be satisfied for the expectation of thermostatic public responsiveness to be met. The level of aggregation at which a particular policy domain is understood must be sufficiently high, high enough to accord with the levels at which the public processes political information. The public may not be able to react sensibly to proposals to change funding formulas for public health benefits, or to technical details that govern the administration of health benefits. But it is much more likely to understand whether the federal government’s direct role in providing health benefits is getting larger or smaller, and react accordingly (Wlezien 1995). In addition, the policy domain under consideration must be of sufficiently high salience that the public can obtain at least limited information about the likely intent or consequences of changes in policy.

This information can come in several forms. It can come most obviously through a detailed understanding of the policymaking process itself. But it can also come through more “gut” level understandings of or experiences with the consequences of policy, through a rudimentary understanding of changes of policy as reported in the press, or by taking cues from other citizens who are more informed or interested in the particular policy area than they. As Soroka and Wlezien state:

“all that is required is that some meaningful proportion of citizens have a basic preference for policy change in one direction or another and that they adjust this preference over time in reaction to what policymakers do, based on the experience those citizens receive from the media, political groups, or friends and family, as well as daily experience with government services, and with society more generally.” (2010, 42)

The ability of the public to provide feedback to policy makers simply demands, in other words, that the actual or likely consequences of a particular policy issue are important and broad enough to be significant to large numbers of people, and that the effects of a particular policy are apparent enough—either through media reports, or partisan cues, or through citizen experiences with the policy itself—for citizens to understand the consequences of particular changes in public policy (see also Erikson, MacKuen, and Stimson 2002).

How well do the two conceptions of social spending fit within this framework of policy feedback? The case for responsiveness to direct spending is relatively clear and has been made in detail elsewhere (Wlezien 1995). While few possess deeply nuanced information about the federal budget, citizens regularly encounter information about federal budgetary activity through the media, political opinion leaders, and the rhetoric of party elites. Further, citizens have regular experiences with federal agencies and government benefits and, at least at the margins, are able to understand whether those services are becoming more or less expensive. Citizens can see or feel the consequences of policy, even if they are not attentive to the policymaking process itself, and these types of “gut” understandings are generally sufficient for citizens to understand the direction in which federal spending is moving, the basic condition required for thermostatic public responsiveness.13

The case for public responsiveness to indirect spending is more complex. Unlike with direct spending—where citizens have at least a vague knowledge of where the appropriations budget comes from—citizens have substantially less knowledge regarding what indirect social spending is and how such policy is made (Mettler 2010). Nevertheless, we argue that citizens are able to respond to changes in indirect spending by using many of the same mechanisms that are thought to underlie responsiveness to direct spending.

Pierson (1993) theorizes that there are two types of conditions that precipitate public feedback to policy makers: resource effects, which determine how policies shape the distribution of incentives and outcomes, and interpretive effects, which influence how policy conveys information about the political environment to citizens. The choice between direct and indirect spending is at least in part a partisan concern: the two major parties have distinct preferences for indirect and direct social spending ratios, with Republicans favoring more indirect social spending and Democrats favoring direct expenditures for public programs (Faricy 2011). This partisan conflict helps citizens to place changes in social policy action into a broader interpretive lens, aligning nicely with established partisan and other heuristics (Lupia and McCubbins 1998). In addition, the two types of social expenditures allocate benefits to different populations and redistribute income in opposing directions, facilitating different kinds of “resource effects” that affect how citizens relate to government. In the language of Pierson, the “outputs” of social spending choice shape economic and political conditions in a way that facilitates the “input” of

13See Wlezien and Soroka (2010, chap.2) for an extended discussion of this point.
citizen responsiveness to government action (Pierson 1993, 595). 14

Further, and as with direct spending, large segments of the citizenry have “street-level” experiences with tax expenditures of various sorts and thus can develop a general understanding of whether these expenditures are getting larger or smaller. In 2008 for example, over 158 million citizens received health insurance through their employer, and more than 100 million were enrolled in employer-sponsored pension plans. In addition, indirect spending constitutes a substantial portion of the federal budget: the U.S. government, in 2008, allocated more than $600 billion to private-sector social programs in the form of tax subsidies. Taken together, these sorts of actions should permit the kind of rudimentary understanding of how policy is changing and roughly how much it is changing in a way that allows the public to respond in a basic thermostatic way. 15

Second, we expect that the two kinds of social policy tools have distributive effects that should produce distinct types of public response. An increase in direct spending targets social benefits to vulnerable populations such as the elderly, the working poor, and the unemployed. Public social programs produce an income effect by redistributing cash and financial benefits downward. They also increase the role of the federal government in directly providing benefits and social services. Given these expected outcomes—and the fact that citizens use the expected outcomes of a policy change as a way to gauge the ideological direction of that change (Soroka and Wlezien 2010)—direct social spending should be perceived as “liberal” policy, given the combined effects of targeting vulnerable populations, progressive redistribution, and direct government administration of benefits (see also Feldman 1984; Jacoby 1994).

As we have discussed above, indirect spending tends to accrue social benefits to wealthier and more economically and professionally secure citizens and does so by enhancing the position of private and market-based actors in the provision of benefits. These ideas are considered, in the main, to be right-of-center policy goals. In addition, the vast majority of tax expenditure programs designed as deductions and exemptions accrue more income benefits to wealthier citizens (mainly homeowners), due to the progressive structure of the income tax.

The resource effects of the two types of social spending are reinforcing, then, in that they serve politically distinct sectors of the population, which allows the mass public to more readily discern the ideological direction of the policy effects. We thus expect that indirect social expenditures, because their intent is to allocate public resources to businesses and private organizations while redistributing wealth upward, should be perceived as conservative policy (Lupia et al. 2007). Following the thermostatic logic, citizens should thus respond to increases in direct social spending by increasing their demand for conservative public policy solutions and respond to increases in indirect spending by increasing their demand for liberal policy solutions.

Third, because of the differences in the ideological intent and substantive consequences of direct and indirect spending, we expect that thermostatic responsiveness to government spending will not be dependent on the amount of government spending of social programs, but rather on the relative balance of direct and indirect spending in financing those programs. Much prior research on this topic has conceived of the opinion-policy link with respect to spending as a question of “more” or “less”—if spending in a particular policy domain increased, the public, all else equal, would call for less spending (and vice versa). But if we consider government spending in this broader sense, the critical driver of public responsiveness is not whether government is spending “more” or “less” in a particular domain, but rather the way in which government is allocating that spending. We thus expect that the public will not react to changes in the total amount of governmental spending when indirect and direct spending are aggregated. What we should see instead is differential responsiveness to the two types of spending, considered separately.

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14 After an election that produces new majorities for the Republican Party, for example, a resulting policy action might be to increase indirect social spending. The majority party, often using the bully pulpit of the presidency, will communicate through all available sources the benefits of recently passed legislation, using typical partisan language of promoting economic freedom. The media will cover the general rise in tax breaks, and due to the tradition of “balanced” presentation, will communicate the policy as both needed tax relief desired by Republicans and the Democratic criticism of tax breaks for the rich. Over time, the out party (and allied interests) has an incentive to portray the current political environment as being too conservative or benefitting only the rich, which will over time be represented in changes to mass public opinion. Groups of voters supporting the out party are more receptive to learning about the current policy environment and mobilizing against it, and the party out of power has incentive to inform and educate their supporters to create energy and action for the next election.

15 Citizens respond to policy change in part because of reactions to the policy change itself, but also in part because they either use policy change to anticipate changes in social outcomes, or because they react to the near-term policy outcomes produced by a policy themselves. Citizens should respond to indirect spending, in other words, for many of the same reasons that guide response to direct spending according to the basic thermostatic logic (Soroka and Wlezien 2010).
Measuring Public Opinion

Our initial measure of public opinion is Stimson’s (1999, 2004) Public Policy Mood. Culled from the responses to thousands of survey questions from dozens of survey houses, Mood is one of the most commonly used empirical measures of aggregate public opinion, particularly in work dealing with relationships between public opinion and public policy. This measure is particularly useful for our purposes for several reasons. First, Mood can be substantively interpreted as a measure of preferences toward the proper size of the federal government and its role in distributing benefits, regulating the economy, and providing social services (see Stimson 1999, 71). This dimension is generally considered to be a “scope of government” dimension, capturing public sentiment on the long-standing “liberal-conservative” divide over the appropriate balance of governmental and market power (see also Kelly 2008). Much variance in public opinion on these sorts of issues tends to load on a single dimension, with aggregate preferences for a wide range of issues moving together over time. Since we have argued that tax expenditures and direct appropriations reflect different conceptions of the proper role of government, this measure is particularly well-suited for the task at hand. Mood is also a highly aggregated measure, encompassing preferences from a wide range of different issues. Because we argue that public responsiveness to the two types of federal spending should be primarily global, a measure which focuses on this kind of broad preference is especially helpful.

Mood can also be understood as a relative measure, which deals broadly with public demands for “more” or “less” direct government power (see Erikson, MacKuen, and Stimson 2002). Rather than measuring the public’s absolute preferences (i.e., “how liberal a government do you want? “), Mood instead taps the public’s relative sense over whether government should move in a “liberal” or “conservative” direction. In this sense, it captures the difference between the public’s ideal level of public policy and current levels of public policy (see Soroka and Wlezien 2010, 25). As we have seen, this relativistic perspective is important to the thermostatic logic.

Finally, and as an empirical matter, Stimson’s measure has been used in a wide variety of analyses which attempt to explore governmental responsiveness to public opinion. Although the exact nature of policy responsiveness varies, changes in public opinion as measured by Mood have been found to matter to the policymaking actions of all three branches of government, and have the potential to affect the degree to which lawmakers pay attention to the preferences of business, interest groups, and nonelected policy actors (e.g., Binder 1999; Coleman 1999; Mishler and Sheehan 1993; Smith 2000). The measure thus has some “face validity” as a way to explore public opinion change on a dimension of preference known to be relevant to the actions of policy makers. The Mood index is a simple 0–100 scale, with higher values indicating greater public “liberalism” (i.e., greater demands for a stronger direct federal role in economic and social welfare matters).

Public Opinion and Social Spending

The central tests of our theory are presented in Table 1, which relates public opinion to direct and indirect federal spending on social programs as operationalized in Figures 1 and 2. The most basic representation of the thermostatic model relates the public’s relative preferences (here, preferences for more or less liberalism in policy) to policy itself (here, levels of direct and indirect spending). The model can be written as:

\[ \Delta Y_t = \alpha + \beta_1(I_{t-1}) + \beta_2D_{t-1} + \beta_3W + \epsilon \]  

(1)

Where \( Y \) is the public’s relative preference for “more” or “less” policy at time \( t \), \( I \) and \( D \) are lagged levels of indirect and direct spending, and \( W \) represents exogenous drivers of public opinion not explicitly captured in either \( I \) or \( D \). At the outset, we will focus on direct and indirect spending alone, but we will later consider the role of common indicators of \( W \). Consistent with the most basic representation of the thermostatic model, then, we model changes in public preferences as a function of lagged levels of spending in each of the two domains. Our expectations are that increases in direct appropriations will decrease public demand for a direct federal role in social welfare matters (and thus decrease public “liberalism” as measured by Mood),

16 In addition, this index does not tend to encapsulate preferences on issues like abortion, gay marriage, or other “cultural” types of concerns. Issues such as this tend to not share much common variance with scope-of-government concerns, and these types of issues remain conceptually distinct from scope-of-government concerns at the individual level (Carsey and Layman 2010). Mood is thus best thought of as a measure of scope-of-government public opinion, not “public opinion” more broadly defined.
while increases in tax expenditures will have the opposite effect (and thus increase public “liberalism”).

The first column of Table 1 models opinion as a function of lagged levels of total social spending, combining direct and indirect expenditures into a summary measure. The results are as expected: the effect of policy on opinion is substantively very small and statistically indistinguishable from zero ($t = 1.06, p = 0.30$). We have argued that there is little reason to expect the public to respond to total levels of social spending, since the total spending measure is actually a conflation of two separate concepts. And when government spending is considered simply as “total spending,” the conclusion, indeed, is that public opinion does not respond to spending policy.

The results are different when we consider indirect and direct spending as separate concepts. The second column models public responsiveness to social welfare spending as we have conceived of it above, including separate measures of direct and indirect spending. The results here are supportive of our expectations: the public is responsive to changes in both indirect and direct social spending, but reacts to the two types of spending in opposite ways. A $1,000 increase in per-capita tax expenditures now translates into a 4.5 percentage point liberal move in public opinion. The effect is relatively modest (the $1,000 increase needed to move public opinion 4.5 points represents roughly one-half of the range of per-capita expenditures over this time period), but given that the observed range of Mood over this time period is only 12 percentage points, even fairly modest changes in public opinion can have significant consequences for the political system (see Erikson, MacKuen, and Stimson 2002).

The effects of direct appropriations are also statistically significant, but as expected, run in the opposite direction: increases in per-capita direct social welfare spending tend to make the public more conservative. Here, a $1,000 increase in direct spending moves the public roughly 1 percentage point in a conservative direction. Direct expenditures are a larger portion of the total social welfare budget, so the smaller coefficient obviously does not necessarily imply a smaller substantive effect: indeed, there is no statistically significant difference between the absolute value of the standardized coefficients for direct ($B = -.76$) and indirect ($B = .99$) spending. In general, then, we find that public preferences are responsive to both direct and indirect social spending. But as would be expected given their redistributive effects and implications for government power, it reacts to direct and indirect spending in opposite ways. Further, we see that the magnitudes of these reactions are similar, consistent with the idea that the same factors that allow the public to respond systematically to changes in direct social appropriations also allow the public to respond systematically to indirect ones. Despite clear differences in how indirect and direct spending policy is made (and perhaps differences in the openness of those processes to public view), the public takes into account available information about both direct and indirect spending when updating its relative preferences for the role of government.

Perhaps more importantly, the public is broadly attentive to the ratio of indirect and direct social spending, a measure which perhaps best captures the real trade-offs that policy makers face in deciding whether to pursue social goals through direct or indirect means. The third column of Table 1 models

17The ratio measure provides a different means of understanding the broad balance between government and market power in the provision of social benefits and can be conceived of as a summary measure of the ideological direction of social spending policy. Changes in the ratio measure represent the degree to which the ideological direction of social spending is moving, on balance, to the left or to the right.
public opinion as a function of the proportion of total federal social welfare spending that is indirect. The result is what would be expected from the first two columns: increases in tax expenditures as a proportion of all social spending tend to move the public in a liberal direction. Simply stated, the results in this table suggests that public preferences are attentive to both how much the federal government is spending on social welfare programs and the balance of how that money is being allocated. These results suggest a public that is attentive to the redistributive consequences of various types of public policy actions and one that is able to perceive both “direct” and “indirect” spending in remarkably similar ways.

For the sake of clarity, our core model focuses solely on the effects of direct and indirect spending. It is important to note, however, that the results hold even after including a variety of other controls thought in past research to matter to public opinion. Most directly, we find that our results regarding public responsiveness to the ideological direction of spending hold after taking into account other nonspending shifts in the size and scope of government. As such, it is critical to understanding changes in the ideological direction of policy to which citizens respond. But spending is only one (albeit a central) thing that the federal government does. Erikson, MacKuen, and Stimson’s (2002) study of dynamic representation, for example, codes the annual ideological content of Mayhew’s (1991) “important laws” measure to derive a summary measure of the number and ideological direction, of laws passed in any given year (see Mayhew (1991) for a more detailed description of the concept of important laws, Erikson, MacKuen and Stimson (2002) for an application to this Laws measure to dynamics of Mood, and Kelly (2008) for an updated measure). The Laws measure (see Column 4 of Table 1) performs in a way consistent with past research (e.g., Erikson, MacKuen, and Stimson 2002; Kelly and Enns 2010): the public responds thermostatically to the broad ideological direction of public policy, with the enactment of “liberal” laws moving the public in a conservative direction and vice versa. But the inclusion of this different measure of policymaking does not do much to diminish the effects of the tax expenditure proportion measure. 19

Similarly, core models of Mood have suggested that the economic conditions of unemployment and inflation can affect Mood in some contexts. Unemployment and inflation are the two critical economic outcome variables, for example, considered by Erikson, MacKuen, and Stimson’s classic study of policy responsiveness (see also Enns and Kellstedt 2008; Kellstedt, Peterson, and Ramirez 2010). The inclusion of these economic variables also does not materially change the effects of spending. While this is clearly not an exhaustive list of factors that could conceivably affect Mood, they are important, theoretically relevant ones prominent in past research on the subject. 20 We can be confident, at least, that the effects of social spending are robust to well-utilized, plausible controls.

### Education and Responsiveness to Social Spending

Evidence of aggregate public responsiveness to both types of social spending broadens our view of thermostatic responsiveness to social policy, showing that the public is responsive not to the total amount of social spending, but rather to the ideological direction of that spending, and the relative balance of spending across direct and indirect means. In this section, we wish to extend that logic further. As we

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18Other representations of opinion-policy relationships have taken different approaches: Erikson, MacKuen, and Stimson (2002) and Soroka and Wlezien (2009), for example, use the traditional OLS lagged dependent variable approach to modeling opinion-policy relationships (modeling public opinion as a function of its own lagged values and lagged values of policy). Jennings (2009) conceives of thermostatic opinion-policy dynamics in the United Kingdom as an error-correction process and uses error-correction modeling techniques. We present the reduced form model used in Table 1, modeling changes in opinion as a function of lagged levels of spending, because it most closely parallels the original thermostat model of Wlezien (1995). But using these alternative specifications produce substantive results, and statistical significance levels of variables of interest, that are similar to the model that we present here (see the online appendix for results of these models.)

19Mayhew’s Laws measure essentially captures broad trends in the ideological direction of public policy activity. As such, it includes both matters that impact federal direct and indirect spending (such as laws that impact funding for Social Security, education, or means-tested benefits) and matters far divorced from spending (such as changes to trade policy, environmental protection policy, or changes in gun or voting-rights laws). The Laws measure is thus conflated at least to some extent with the spending policy measures. We have also run the analyses with a revised version of Mayhew’s measure with laws that directly impact social spending purged from the analysis. Doing so increases the impact of Laws on Mood, but does not change the statistical significance or substantive importance of the social spending ratio.

20In addition, we have estimated models controlling for other factors thought to move Mood—in particular, consumer sentiment (Durr 1993) and income inequality (Kelly and Enns 2010). These factors (see online appendix) generally behave in a way consistent with past research, but do not reduce the substantive impact or statistical significance of the spending variables.
have discussed, a growing body of research suggests that because of the relatively low information demands placed on citizens for thermostat responsiveness to occur, we see evidence of dynamic responsiveness to policy not only among a politically engaged and connected elite, but at least to some extent, citizens with lower levels of attentiveness as well. This is true when it comes to direct spending, as thermostat responsive ness in important social policy domains occurs among the less educated and less politically sophisticated (Soroka and Wlezien 2010). Here, we see whether these implications of the thermostat model also extend to indirect spending—whether, in other words, public responsiveness to indirect social policy runs as “deep” into the electorate as responsiveness to direct social policy.

Data from the General Social Survey (GSS) allows us to explore the effects of political engagement on public responsiveness to social spending. More directly, we can see whether the aggregate results in Table 1 hold for citizens in different subsets of the population. Mood is an aggregate indicator of public preferences comprised from a number of different questions that are not asked consistently over time. It is thus not possible to directly disaggregate Mood into subgroup “Moods” for any particular subset of the population. But the General Social survey contains a battery of questions, broadly relating to government action in a variety of social areas, which can be used to proxy Mood. Although the measure is much simpler and more limited in scope, the aggregates of it correlate with the broader Mood index at 0.85 and capture the same shifts and changes in aggregate opinion as Mood. Since the GSS makes basic demographic data for all respondents, we can measure “Moods” at a level below the public as a whole by aggregating these individual-level scores over relevant subgroups of the population.

The GSS does not consistently ask questions that measure political sophistication or engagement directly. Instead, we proxy it using the GSS measures for education. Although education and engagement are clearly not the same thing, they are strongly correlated with one another, and education does represent a primary way through which citizens learn to receive and process information about the political context (Abrajano 2005). We thus divide the population into three groups based on levels of formal education: those without a high school education, those with a high school education but no further degree, and those with a college degree or more. We then can create separate subgroup “Moods” for each of these groups.

In Table 2, we replicate the core model from Table 1—opinion as a function of the social spending ratio—for each of the educational groups. The first column of Table 2 shows results mirroring the penultimate columns in Table 1 using as the dependent variable the aggregate Mood proxy instead of Stimson’s Mood index. This set of results shows a strong correspondence between the results using Mood itself, and the results using the GSS proxy for it: whatever the limitations of the GSS proxy measure, it recovers results nearly identical to those shown in Table 1, providing some degree of confidence that the results we see in the rest of Table 1 would be obtained if we were able to disaggregate Mood itself.

The final three sets of results illustrate the effects of spending on opinion for each of the three subgroups considered separately. These results illustrate two points. First, the greatest levels of responsiveness to the social spending ratio appears to be in the most educated subgroup—although because of the comparably higher standard errors for the “more than high school” model, we cannot say that this group is more...
responsive than the group with only a high school education ($X^2$ test of difference = 1.94, $p = .16$).

Second, responsiveness to spending is not restricted to only a tiny subset of the population, but neither is it universal. The coefficients for both the “more than high school” and “high school” group are both significant, in the expected direction, and substantively important. The high school group, for example, responds to aggregate spending in ways that might look like the aggregate public. The least educated group, by contrast, appears to be unresponsive to changes in spending. The coefficient for the spending ratio variable is not significantly different from zero for this group, and this group is significantly less responsive than the citizens with a high school diploma ($X^2 = 4.56$) or a college degree ($X^2 = 9.53$).

The substantive implication of these models is that public responsiveness to the policy context does not necessarily filter down to all subsets of the population. There are segments of the population—in our models, those with less than a high school diploma, but more broadly citizens with exceptionally low levels of political engagement—who cannot or do not update preferences in response to policy. But nor is responsiveness to spending restricted to a very narrow slice of the electorate, as citizens with even a high school education respond systematically to both direct and indirect spending. In addition, we see whatever role education plays in shaping responsiveness to policy applies equally to both direct and indirect spending. This provides suggestive, though not definitive, evidence that the same kinds of factors which permit (or not) responsiveness to direct spending also permit responsiveness to indirect spending.

**Conclusion**

This article demonstrates that the mass public follows and properly interprets changes to the *modality* of social spending as a shift in the ideological direction of public policy. Social programs funded through direct and indirect means—education, income security, public health—are generally popular (Ellis and Stimson 2009). The changes in public opinion in response to spending policy that we have observed here are not reflective of the public’s desire for “more” or “less” spending: the coefficient for “total spending”—aggregating across indirect and direct realms—in Table 1, for example, was substantively

### Table 2 Effects of Social Spending on Public Opinion, by Education Level

<table>
<thead>
<tr>
<th>Dependent variable: changes in public liberalism,</th>
<th>GSS Mood Proxy</th>
<th>Less than High School</th>
<th>High School</th>
<th>More Than High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Spending Ratio$_{(t-1)}$</td>
<td>25.70* (8.67)</td>
<td>7.27 (11.55)</td>
<td>27.67* (6.30)</td>
<td>42.57* (14.90)</td>
</tr>
<tr>
<td>Constant</td>
<td>-5.07* (1.75)</td>
<td>-1.30 (2.31)</td>
<td>0.40 (0.67)</td>
<td>0.01 (1.57)</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.23</td>
<td>0.03</td>
<td>0.37</td>
<td>0.20</td>
</tr>
</tbody>
</table>

Notes: Table entries are OLS coefficients (column 1) and Seemingly Unrelated Regression Coefficients (columns 2-8). Standard errors in parentheses. N=33 for all models. * $p < .05$
small and statistically indistinguishable from zero. Rather, we argue that the proper way to conceive of opinion change in response to spending is best understood as changing public perceptions regarding the role of the government in the economy as it goes about financing the provision of social benefits—more specifically, about the choice between indirect and direct spending.

Policy makers tend to view direct and indirect spending as alternative tools toward achieving popular social goals, and the differences between views of these tools tend to be ideologically driven (Faricy 2011). The idea of retirement-age income security, for example, is exceedingly popular, and direct government programs to ensure such security (most obviously, Social Security) have proven to be too widely supported for frontal assaults from political conservatives. Consequently, conservative elites have supported a long-term strategy of building a private (but government-incentivized) alternative to the public social system. After the Republicans were defeated in their attempt to reduce Social Security in 1982, the Heritage Foundation began promoting the idea of using 401ks and IRAs to construct an alternative to Social Security (Rich 2004). Teles (2007) argues that the Republican Party, with assistance from the Heritage Foundation, designed a disentrenchment plan for Social Security built primarily not on attacking the system itself, but through efforts to increase public familiarity with and reliance on private alternatives.

More generally, this example illustrates that policy decisions which alter the balance of direct and indirect spending alter the balance between public and private power by changing the allocation of government money from direct financing of public social programs to the subsidization of private ones (and vice versa). At a minimum, our results suggest that the public, at least in broad terms, understands the ideological differences between direct and indirect government spending in a way consistent with how these differences are understood by policy makers and has the capacity to react accordingly.

In addition, our results have implications for understanding the relationship between the public and the “hidden” (Howard 1999) social welfare state in a way that helps to merge insights from two distinct lines of scholarship. It is generally argued that most citizens do not have an even moderately detailed understanding of the “tax expenditure” concept (Mettler 2010) and that the process of indirect social policymaking is less routinized, and more concealed from public view, than many other policymaking processes (e.g., Howard 2007). Nothing in this article casts doubt on either of these ideas. But the extension of the thermostatic logic to indirect spending shows that public responsiveness to indirect social policy may still be systematic and sensible.

Despite clear limitations in both public understanding of indirect spending policy and the process through which such policy is made, the public typically reacts to increases in indirect spending—and in the ratio of indirect to direct spending—by moving its preferences in a liberal direction. This finding comports well with what we know from research into public opinion and direct spending: the public’s lack of knowledge regarding the budgetary process, or even the rough size of the direct appropriations budget in any number of categories (Gilens 2005), does not preclude public opinion from responding systematically to changes in the size of that budget in those same categories (Soroka and Wlezien 2010). More generally, we believe that these findings help to integrate what we know about policy feedback from scholars of American public policy with what we know about mass preference change from public opinion scholars and helps to provide a first step upon which future work can build in productively linking these two lines of research (Mettler and Soss 2004).

It is important to be clear about the limitations of our argument. We are not arguing that public opinion is optimally responsive to all types of public policy, nor are we suggesting that the indirect policymaking process does not, in theory, invite the disproportionate influence of special interests. We simply argue that citizens have the capacity to develop a general sense about the direction in which policy is moving and can react accordingly. This is, to be sure, a highly simplified understanding. But even these broad kinds of public responsiveness tend to facilitate policy-maker attentiveness to public opinion (Soroka and Wlezien 2010).

The next step, of course, is to examine whether public opinion does, in fact, affect the balance of direct and indirect social spending. We would expect to see changes in public preferences result in changes to social spending policy. But given this framework, changes in public sentiment should not affect absolute levels of government spending, but rather the allocation of that spending across direct and indirect means. Given the deep popularity of social programs and benefits, we would not expect that elected officials will interpret an increase in mass conservatism to be a directive for less government spending,
but instead, as a directive to use spending to stimulate and subsidize the private market.

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