

**BUREAUCRATS, POLICY ATTITUDES, AND
POLITICAL BEHAVIOR: A REAPPRAISAL**

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Abstract

Scholars have explored the degree to which government employees differ from other citizens in their political and policy attitudes, levels of voter participation, and the candidates and political parties for whom they vote. In this paper we build on the work of Andre Blais and other scholars to reconsider the effects of government employment on political and policy attitudes, voter turnout, and vote choice. Previous research on this topic is based on theories of government growth that suggest the importance of public-sector bureaucrats in shaping government spending and taxation decisions. We use survey data from the United States, Canada, and other western democracies to consider the degree to which government bureaucrats differ from other citizens in their policy and political attitudes, levels of political participation, and voting behavior. Our findings suggest that there remains considerable empirical support for the bureau voting theory—i.e., in comparison to individuals not employed in the public sector, government employees tend to be more liberal, have higher rates of voter turnout, and vote for liberal parties and candidates.

The size of the public sector in democratic political systems has long drawn the attention of both scholars and political observers. While a wide range of theoretical arguments have been considered in explaining variation in the size of government, most explanations can be grouped into two broad categories (Lowery and Berry, 1983). On one hand there are the **responsive government** explanations, which suggest that the size of the public sector is best explained by the preferences for government goods and services in the mass public. Here government size is seen as a reflection of the level of government activity (and the associated costs of that level of activity) that is preferred by some aggregation of mass preferences, often as represented in the preferences of the median voter. On the other hand, the **excessive government** explanations suggest that the growth in the size of the public sector is a function of actions by government officials to expand the size of government beyond what the mass public would prefer. Scholarly advocates of excessive government explanations paint a less benevolent view of the public sector, suggesting that government officials use a combination of political power, deception, or obfuscation to secure greater support for government programs than would normally be supported by voters.

Public-sector employees play a major role in some of the excessive government theories.¹ For instance, Niskanen (1971) proposes what has been termed the **bureau information monopoly theory**, in which he contends that government bureaucrats are motivated by self-interest to seek larger budgets for their government agencies. According to Niskanen, public-sector employees use their near-monopoly over policy-relevant information to press political decision makers for larger budgets. In Niskanen's formulation, most of the influence exerted by bureaucrats takes place in institutional settings, such as congressional committee hearings and other legislative-bureaucratic interactions.

Alternatively, other scholars have suggested that there is an electoral mechanism for translating the relative preferences of government employees into their preferred size of the public sector. The **bureau voting theory** suggests that government bureaucrats are more liberal and pro-spending than other

citizens, that they are more likely to turn out to vote, and that they show a greater propensity to cast votes for left-leaning parties and candidates who, presumably, are more supportive of an expanded public sector (Sears and Citrin, 1982; Blais and Dion, 1991; Blais, Blake, and Dion, 1997; Garand, Parkhurst, and Seoud, 1991a; Corey and Garand, 2002). The implication is that government employees constitute a larger share of the electorate than of the general population, and this gives them a disproportionate influence over electoral outcomes and, ultimately, over elected officials (Blair, 2003). Thus far scholars have uncovered discernible evidence to support this theoretical argument, both in the United States (Lewis, 1990; Garand, Parkhurst, and Seoud, 1991a; Corey and Garand, 2002) and in western industrial democracies (Blais, Blake, and Dion, 1991; Blake, 1991; Jensen, Sum, and Flynn, 2009).

In this paper we build on previous research to provide an updated evaluation of hypotheses derived from the bureau voting theory. With only a few notable exceptions, the lion's share of previous research on the bureau voting theory was conducted during the 1990s, and it is arguably time to revisit the empirical support for this theory using more recent survey data. Specifically, we ask the following questions. First, are government employees more likely than other citizens to adopt attitudes in support of left-leaning policies, candidates, and political parties that favor an expanded public sector and greater government spending? Second, are public-sector employees more likely than other citizens to turn out to vote in elections? Third, are government bureaucrats more likely to cast votes for left-leaning political parties and candidates—i.e., those who typically favor an expanded public sector and greater government spending? Our approach here is explicitly comparative. In order to explore these research questions, we use survey data from a variety of sources in the United States, Canada, and other western industrial democracies. These data sets include the American National Election Study (2004, 2008), the Canadian Election Study (2008), the World Values Survey (2005), and the International Social Survey Programme (2006). The results of our analyses provide a comparative, cross-national test of hypotheses about political attitudes and behavior among public-sector employees that are derived from the bureau voting theory.

WHAT DO WE (THINK WE) KNOW?

The scholarly literature has generally provided fairly strong support for the bureau voting theory, though there is by no means a consensus about the degree to which government employees differ from other citizens in their political attitudes and behavior. Much of the early work on bureaucratic attitudes focused on senior executives, both in the United States (Aberbach and Rockman, 1976; Aberbach, Putnam, and Rockman, 1981; Dolan, 2002) and in western democracies (Putnam, 1973). This is the very group of bureaucrats that draws the attention of Niskanen, since these bureaucrats are in positions of authority in government departments and agencies. In early research scholars did not explore directly a full range of attitude differences between senior executives and the non-bureaucracy mass public; rather, this work tends to focus on work responsibilities, perceptions of political and bureaucratic processes, and demographic attributes. Aberbach et al (1981) do find a left-leaning tendency in the political attitudes of senior executives in the United States, though in a more recent work Dolan (2002) finds that American senior executives are significantly *less* likely than the general public to support greater spending in a variety of policy areas.

Public-sector employees are a much more diverse group than senior executives, since government employment covers a wide range of occupations, salary levels, and work responsibilities. Studies that are based on large-scale surveys of the mass public and that differentiate public-sector employees and other individuals are more likely to find support for the bureau voting model. In the United States, Garand, Parkhurst, and Seoud (1991a, 1991b) find considerable support for the idea that public-sector employees differ from their civilian counterparts in their political attitudes and behaviors. Using data from the American National Election Studies (ANES) from 1982, 1984, and 1986, they find that government employees are generally more likely to hold more liberal attitudes, hold more favorable views toward Democrats and liberal political figures, and support spending in some selected policy areas. Moreover, Garand et al. (1991a) find that public-sector employees are substantially more likely to turn out to vote;

the differences in turnout rates for government employees and other citizens range from 9% to 22% across years and races for different offices. This finding of higher turnout rates for public-sector employees is reinforced by Corey and Garand (2002), who find that public-sector employees are significantly more likely to turn out during the 1996 American national elections. Garand et al. (1991a) also find that bureaucrats are significantly more likely to vote for Democratic candidates, presumably as a reflection of greater willingness to support more liberal candidates. Finally, Garand et al. (1991b) use data from the 1982 ANES to consider differences in attitudes and behavior among federal government employees, state and local government employees, and the mass public; they find support for the bureau voting theory among both federal and state-local government employees, though the behavior and attitudes of state and local bureaucrats are more in line with expectations from the bureau voting model than those of federal government employees.

In cross-national research scholars have also found support for the bureau voting theory. Perhaps the most important comparative work on the attitudes and behavior of government bureaucrats is by Blais and Dion (1991), who collected a series of essays assessing empirical support for the budget-maximizing behavior by public-sector bureaucrats. Blake (1991) finds support for the view that public-sector employees in Canada, Norway, Sweden, and the United States are more likely to stake out a position to the left of other citizens, though controls for union membership tend to depress the effect of government employment by a discernible amount. It is interesting to note that Blake finds the strongest effects of government employment on ideology among those in professional and managerial/technical occupations, while individuals in other occupational categories hold relatively indistinct political views based on whether or not they work for the public sector. Regarding voting behavior, Blais, Blake, and Dion (1991) find that government employees are significantly more likely to support left-leaning political parties and candidates in Australia, Great Britain, Japan, and the Netherlands, while little support is found to support this assertion for Germany and Switzerland. For other countries (i.e., Canada, Denmark, France, and the

United States), the results are somewhat ambiguous. More recently, Jensen, Sum, and Flynn (2009) explore the degree to which public-sector employment affects ideology, turnout, and vote choice in 18 western democracies. Their findings suggest strong evidence of government employment effects in the aggregate, though when they specify country-specific effects of government employment they find that relatively few countries simultaneously exhibit strong support for the ideology, turnout, *and* vote choice components of the bureau voting theory. Interestingly, Jensen et al. find little evidence that unionized government employees differ from their nonunionized counterparts in the attitudes and behaviors.

Overall, it appears that there is moderately strong evidence that government employees differ in predictable ways from other citizens. Although there is (1) variation in support for the three components of the bureau voting theory across countries and (2) sometimes inconsistent levels of support among the three major components of the bureau voting theory within countries, the evidence in favor of the theory is sufficient strong to support the extension of this research program to cover a more recent time frame.

BUREAUCRATS AND THE PUBLIC SECTOR

Why should bureaucrats be budget maximizers, if indeed they are? More specifically, why should government employees be more likely than other citizens to hold left-leaning views, support greater government spending, exhibit higher turnout rates, and vote for left-leaning candidates?

Niskanen's Bureau Information Monopoly Theory

As a starting point, we begin with Niskanen's (1971) view that government bureaucrats are rational self-interested actors, and their support of expanded agency budgets is derived from their self-interest. For Niskanen, public-sector bureaucrats seek to maximize agency budgets in order to achieve any of a number of goals, including higher salaries, flexibility in policy-making, and ease of bureaucratic management, among other things. Simply, Niskanen suggests that higher budgets bring to bureaucrats greater personal reward and greater ease and flexibility in conducting their jobs. Not only are bureaucrats more likely to increase their personal salaries and benefits when funds are readily available, but their jobs are made

easier by having department or agency budgets that permit them to hire adequate personal, purchase equipment and supplies, and administer department programs. It is also the case that government bureaucrats are often strong adherents of the policy goals of their home agencies; bureaucrats who advocate for their agency policy mission—Downs (1967) refers to these bureaucrats as zealots and, to some extent, advocates—will support increased budgets for their agencies as a means of carrying out these policy goals in the strongest possible way. Finally, in more recent work Niskanen (1991) focuses attention on government bureaucrats' efforts to secure adequate discretionary budgets, though even here it is likely the case that public-sector employees express a preference for expanded agency budgets in order to create discretionary funds within the overall agency budget.

How do government bureaucrats achieve their goal of budget maximization, if indeed they do? Niskanen points to the role of informational monopolies in helping government employees to make a case for larger budgets. Public-sector bureaucrats are intimately familiar with the workings of their agencies and departments, as well as the clients with whom they are dealing, the resources necessary to fulfill agency goals, and what is necessary to satisfy personal self-interest goals. This information is far less readily available to political decision makers, most of whom must be policy generalists who cannot invest the time, energy, and resources necessary to compete with government bureaucrats over the operation of their departments and agencies. The result is that bureaucrats have a strong information advantage over elected officials when they are providing advice through legislative committee hearings and other forms of legislative-executive contact.

Bureau Voting Theory

An alternative mechanism through which government employees can affect government spending is found in the electoral arena. If government employees are more likely to (1) support more liberal, pro-spending policies, (2) cast votes for candidates who promote liberal, pro-spending policies, and (3) turn out on election day, they can shift the position of the median voter to the left and hence influence government

policy related to spending in a liberal direction. Hence budget maximization—or, at least, budget expansion—can take place through other processes and without the information monopolies in political institutions envisioned by Niskanen.

Of course, government employees are a diverse group, and by no means can one assume that all government bureaucrats behave in the manner suggested by the bureau voting theory. Clearly, public-sector employees do not comprise a monolithic group that acts in one voice. Rather, there will be variation in the attitudes and behaviors of public-sector employees, just as there is variation in the attitudes and behaviors of other citizens. However, the bureau voting theory does not require a monolithic group of government bureaucrats acting in lockstep at the poll. As the attitudes and behaviors of the average government employee deviates from those of other citizens, bureaucrats become an electoral force to be reckoned with and increase their influence over elected officials by shifting them to the left (Blair, 2003).

What explains the possible differences in attitudes and behaviors for public-sector employees and other citizens? Following Garand et al. (1991), we suggest that there are two possible processes at work. First, attitudinal and behavioral differences can be explained by *selection*, whereby individuals who are predisposed toward an active government and liberal policies are more likely to seek a career that takes them into government employment. If someone perceives that an active government is necessary to protect the environment, alleviate poverty, teach public-school children, and direct the economy (among many other things), it is more likely that this person would seek a career in government service as a means of furthering those policy goals. Hence the selection model would predict that individuals who seek careers in government will be different in their political attitudes and behaviors than those who seek other careers. This means that differences between government employees and others would be observed early in their career cycles.

Second, attitudinal and behavior differences can be explained by organizational *socialization*, whereby individuals enter into government service with political predispositions that are similar to those of other

individuals but that over time they are socialized by their employing government agencies into pro-government, pro-spending dispositions. Socialization can occur as a result of explicit indoctrination, whereby the messages coming from agency leadership or from the general organizational culture constantly make clear the need for the agency to secure additional funds to achieve its goals. Alternatively, socialization can occur through an explicit recognition of self-interest as public-sector employees learn that their personal well-being and that of their agencies require expanding budgets over time.

It is important to note that attitudes and behaviors that are consistent with the bureau voting theory can occur as a result of both selection and socialization processes. Individuals may well select themselves into government service based on their political propensities to support an active government and higher levels of spending, but these propensities may be developed and/or reinforced as individuals work with other, like-minded government employees who come to work for the public sector as a result of their own selection processes.

DATA AND METHODS

In previous research scholars have often tested the bureau voting theory using survey data collected from large samples drawn from the mass public. In this study, we also use large sample survey data to test the three hypotheses derived from the bureau voting theory. However, unlike previous research we revisit and reassess empirical support for the bureau voting theory using data from several sources in the United States, Canada, and other western democracies. Our general approach is to combine bivariate and multivariate analyses to draw broad conclusions about the bureau voting theory. We begin by estimating the difference-in-means for government employees and other citizens on attitudinal and behavioral variables for which the bureau voting theory would predict differences. We begin by estimating the difference-in-means for government employees and other citizens on (1) their support for left-leaning policies that favor an expanded public sector and greater government spending, (2) the probability that they turn out and vote, and (3) how likely they are to cast votes for left-leaning political parties and

candidates. We also estimate for these dependent variables multivariate models that include government employment and various control variables as independent variables; here we explore whether differences in attitudes and behaviors for government employees and other citizens are observed even as we control for the effects of other variables expected to be related to our various dependent variables.

Data

In order to test the bureau voting model empirically, it is necessary to have data on various political attitudes (i.e., partisanship, ideology, spending preferences) and behaviors (i.e., voter turnout, vote choice), as well as on respondents' employment sector (public-sector versus other) and appropriate control variables. Fortunately, appropriate data are available from several sources: (1) for the United States, the American National Election Study (ANES) surveys for 2004 and 2008; (2) for Canada, the 2008 Canadian Election Study (CES); (3) for western industrial democracies, the 2005 World Values Survey (WVS) and the 2006 International Social Survey Programme (ISSP). For the World Values Survey, we use data from the United States, Italy, Canada, Australia, Norway, Sweden, Finland, Switzerland, and Germany. For data from the International Social Survey Programme, we use data from Australia, Canada, Denmark, Finland, France, Germany, Ireland, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States.

Analytical strategy

As noted, the bureau voting theory suggests that government employees are more likely than other citizens to hold liberal political attitudes, cast votes, and vote for liberal candidates. At a basic level, empirical support for the bureau voting theory only requires that we find that the bivariate relationship between government employment and liberal attitudes, turnout, and voting for liberal candidates is positive and significant. Hence we present here a series of bivariate tests of the core hypotheses developed from the bureau voting theory, and we do so comparatively by using data from the above-mentioned scholarly surveys.

Demonstrating that government employees behave as expected in comparison to other citizens is not the same thing as explaining those differences. In order to explain the differences, we also estimate multivariate models of political attitudes, turnout, and vote choice that include government employment as the key independent variable, but that are accompanied by other variables that capture individuals' long standing attributes. With the multivariate models, our goal is to answer a key question: is there something intrinsic about government employment *per se* that socializes individuals from all political stripes and transforms them (or at least some of them) into individuals who hold liberal attitudes, turn out to vote, and vote for more liberal candidates, all in comparison to non-bureaucrats who have not had those same government employment experiences? Alternatively, is there a selection process at work, whereby individuals who hold liberal attitudes, exhibit high turnout rates, and tend to vote for liberal candidates are more likely to seek government employment in the first place?

The observation of a simple bivariate relationship between public-sector employment, on one hand, and liberal political attitudes, voter turnout, and liberal vote choice, on the other, tells us little about **why** government employees differ from other citizens. Answering the "why" question requires a more detailed and intentional research design than what we propose here. However, we suggest that it is possible to provide a rough, indirect test of these competing explanations of differences between public-sector employees and other individuals. Following Garand et al. (1991a), we contend that we can use a multivariate model to estimate indirectly the degree to which differences between government employees and others are due to government employment *per se* (i.e., that individuals shift their political positions or behaviors due to public-sector employment) or to long-term dispositions of individuals that predispose them to government employment in the first place.

Our logic is as follows. We include in our models a set of independent variables that represent individuals' attributes of long standing. This includes political attitudes (e.g., partisan identification, ideological orientation) that are developed through the socialization process and that tend to remain fairly

stable over time, as well as fixed or relatively stable personal attributes (e.g., gender, race, education, social class) that are generally found to be associated with political attitudes and behavior. If the effect of government employment remains intact after we control for the effects of these longstanding attributes, we suggest that it is likely that it is government employment *per se* that is affecting individuals' values on the dependent variable. In other words, if controlling for the effects of variables that should affect political attitudes and behavior at the time that individuals choose their career path (i.e., the selection stage) does not diminish the coefficient for government employment, it would appear that government employment has an independent effect on their attitudes and behavior. On the other hand, if the effect of government employment disappears once the effects of these longstanding attributes are taken into account, it would appear that it is these attributes that explain the observed bivariate government employment effect.

Of course, in testing the selection and socialization explanations of public-sector employment effects, there is no substitute for a longitudinal study that tracks political attitudes and behavior for government employees and other citizens from their pre-employment period into their employment period. Yet short of having such longitudinal data, we can do the best that we can with existing data to suggest an indirect test of these explanations.

Variables and measurement

A detailed summary of how our dependent and independent variables are measured can be found in Appendices 1-4. Here we briefly describe the variables used in our analysis.

Independent variable: government employment. In each survey we are able to distinguish public sector employees from other citizens, and we do so here by creating a variable coded 1 for respondents who are government employees, and 0 for respondents who do not designate themselves as government employees. This is the traditional measurement approach in previous studies on differences in the political attitudes and behavior of government employees and other citizens. Given the arguments that we make regarding the bureau voting model, we expect that government employees will be less likely to hold

political attitudes associated with the conservative position, more likely to vote in elections, and more likely to support candidates affiliated with liberal political parties.

We do note, however, two shortcomings with this measure. First, this variable fails to capture fully the self-interest component of government employment, primarily because the surveys on which we rely do not include data on the occupational status of respondents' spouses or other family members. Individuals married to a government employee may be affected, albeit less directly, by the same self-interest concerns that affect their government employee spouses. Second, this variable lacks specificity in terms of respondents' department or agency job assignments or, in federal systems, the level of government (federal, state, or local) for which the respondent works. A public-sector employee who is a public school teacher may have different configuration of interests than other public-sector employees working for, say, the state Department of Transportation, the federal Department of the Treasury, or a local welfare agency. Unfortunately, standard survey data sets do not include specific questions to measure either (1) whether the employee works for the federal, state, or local level, or (2) which agency or department employs the respondent.

Dependent variable: political attitudes. The bureau voting theory suggests that government employees should differ from other citizens on a variety of attitudinal variables that are relevant to the scope and size of government. Among these, perhaps the most consistently used variable in cross-national research on political attitudes and behavior is liberal-conservative ideology (or left-right self-placement). This variable is usually measured as a scale with liberal (left) and conservative (right) positions at the endpoints. We use the appropriate left-right scale in each survey as a dependent variable, measured so that a high score is in the conservative direction; we expect that government employees will be more liberal than other citizens, and so the coefficient for the government employment variable should be negative.

The ANES and CES surveys also include a wide range of attitudinal variables that are directly or indirectly relevant to the bureau voting theory. From the ANES, we include as dependent variables partisan identification, presidential and congressional approval, and feeling thermometers for various political figures and objects. In addition, both the ANES and CES include items relating to respondents' attitudes toward government spending and taxation. We include these variables as dependent variables in our analysis, and we hypothesize that government employees will be more likely than other citizens to support increased spending (particularly in domestic policy areas) and taxation.

Dependent variable: voter turnout. One of the strongest effects of public-sector employment that is consistent with the bureau voting theory is that government employees are more likely to turn out to vote than other citizens. In this paper we consider the turnout effect using two dependent variables. First, in some surveys respondents are asked directly to report whether they had voted in “the most recent election” or in a specific election. This variable is typically coded 1 for respondents who report that they voted, and 0 otherwise. Second, in a few other instances respondents are asked about their intention to vote in an upcoming election. In these cases we code the variable so that a higher score is associated with a greater certainty that the respondent will cast a vote in the upcoming election.

For these variables, we hypothesize that the coefficient for the government employment variable will be positive, indicating that government employees are more likely than other citizens to vote.

Dependent variable: vote choice. The final core hypothesis for the bureau voting theory is that public-sector employees should be more likely than other citizens to vote for candidates and political parties that are on the liberal side of the ideological spectrum—i.e., parties and candidates who are likely to be more amenable to an expanded and active public sector. Hence government employment should be positively related to voting for liberal candidates or parties and negatively related to voting for conservative candidates or parties.

In a comparative project on vote choice, one must account for the variety of party and candidate choices with which voters are confronted. In the United States, this is relatively straightforward. For the 2004 and 2008 elections, we code the vote choice variable as 1 for respondents who reported that they voted for the Republican candidates, and 0 for respondents who reported that they voted for the Democratic candidates. We explore the effect of government employment on voting for president, the U.S. House, and the U.S. Senate. We hypothesize that the coefficient for public-sector employment in a logit model of vote choice will be negative, indicating that government employees are less likely to support Republican candidates.

For other countries the task of estimating a model of vote choice that compares government employees and other individuals is made more complicated by the multiple viable choices available to voters. For the CES and WVS data sets, we create a nominal variable that codes vote intentions or party voting preferences for all parties on the ballot. We then estimate a multinomial logit model to test the hypothesis that public-sector bureaucrats will be less likely to vote for conservative parties and/or candidates. We identify the most conservative major party in each country using mean self-placements on the liberal-conservative scale for those voting for each party; the most conservative party becomes the baseline (comparison) group in a multinomial logit model. Hence the coefficients for public-sector employment should be positive, particularly for comparisons involving more liberal parties. The positive coefficient would indicate that there is a greater propensity for government employees (than for other individuals) to cast their votes for more liberal parties and/or candidates in comparison to the most conservative party.

Independent (control) variables. As noted, we include in our basic multivariate models a variety of control variables, most of which represent longstanding political attitudes and other attributes. The variables included in our models differ across data sets (primarily due to data availability) and for different dependent variables (primarily due to theoretical considerations). Not all models are identical, but we

suggest that our multivariate models permit us to estimate the effect of government employment on our three sets of dependent variables.

For our attitudinal models, we include in each model several variables: (1) education; (2) income; (3) gender; and (4) age. We also include other independent variables depending on which data set we are using. For instance, for our models estimated using ANES data, we also include partisan identification and racial/ethnicity variables in our models, while for the WVS data we add measures of social class identification.

For our turnout models, we include for all models several common variables across data sets: (1) ideological intensity; (2) political interest; (3) education; (4) income; (5) age; and (6) gender. These variables have often been found in previous studies to be related to voter turnout and hence serve as strong controls in models used to estimate the effects of government employment on turnout. We also include other variables (e.g., social class, union membership), depending on their availability in given data sets.

Finally, in all of our vote choice models we include four common independent variables: (1) ideological self-identification, or left-right placement; (2) education; (3) income; and (4) gender. Here again, these variables are expected to be related to vote choice in a variety of electoral contexts. We also include in selected models other variables available in specific data sets, including economic evaluations, race and ethnicity, social class, church attendance and religiosity, and union membership.

EMPIRICAL RESULTS

We now turn to our empirical tests of the various components of the bureau voting theory. Our discussion of empirical results is organized thematically. We begin with a discussion of the effects of government employment on political attitudes, and then we move to a discussion of results for turnout and vote choice.

Do government employees hold more liberal political attitudes than other individuals?

General political attitudes: ANES (2004 and 2008). We begin with an examination of data from the American National Election Study, which has a rich set of attitudinal variables representing a variety of political and policy concepts. In Table 1 we report difference-in-means tests for government employees and other citizens for the 2004 and 2008 ANES surveys, as well as the coefficients for the government employment variable in multivariate models of each dependent variable. Our difference-in-means results provide strong support for the bureau voting theory for the 2004 ANES, though empirical support is much weaker for the 2008 ANES. For 2004, we find that government employees have significantly lower scores on the partisanship variable (scored in the Republican direction) and in their approval of various aspects of the job performance of (Republican) President Bush. Moreover, public-sector bureaucrats are significantly less likely to see the country as heading in the right direction under the Republican president. On the other hand, there are only a few significant differences between public-sector employees and other individuals in 2008. There is a significant partisan difference between government employees and others, with government employees significantly less likely to be Republicans, and government employees are more likely to lend approval to the (Democratic-controlled) U.S. Congress and less likely to approve of the job that the (Republican) president is doing in the area of health care. But none of the other differences-in-means are statistically distinguishable from 0.

In Table 2 we report the results of bivariate and multivariate analyses that consider the effect of government employment on attitudes toward various political figures and objects. Feeling thermometer variables are coded on a scale from 0 (strong negative feelings) to 100 (strong positive feelings), with the midpoint of 50 designated as the neutral point. Here again, we find that government employees differ from other citizens in their assessments of various political actors, particularly in 2004. In that year government employees are more likely to have significantly more positive evaluations of the Democratic presidential ticket (i.e., John Kerry and John Edwards) and of the Democratic Party, as well as significantly

more negative evaluations of the Republican presidential ticket (i.e., President George Bush and Vice-President Dick Cheney), as well as of the Republican Party. On the other hand, in 2008 the differences between government employees and other individuals are much more muted. Government employees do like Democratic presidential candidate Barack Obama and Democratic vice-presidential candidate Joe Biden, as well as the Democratic Party, more than other citizens, but none of the other differences achieve conventional levels of statistical significance.

It is interesting to note that many of the government employment effects observed in Tables 1 and 2 disappear in many instances once one controls for the effects of other independent variables in a multivariate model. The public-sector coefficient is negative and statistically significant in both 2004 ($b = -0.373$, $t = -2.81$) and 2008 ($b = -0.488$, $t = -4.19$), suggesting that government employees are considerably less Republican than other individuals, even after accounting for the effects of other variables thought to be related to partisanship. There are a few other significant coefficients—i.e., congressional approval (2004) and presidential approval on the environment (2008), feeling thermometer support for John Edwards and the Democratic Party (2004)—but for the most part the effects of government employment on general attitudes disappear in a multivariate model. It would appear that there is a bivariate government employment effect that is consistent with this component of the bureau voting theory, but differences between government employees and other citizens are typically attributable to the effects of other independent variables.

Liberal-conservative political ideology. In cross-national research political ideology is among the political attitudes that draw the greatest attention. This variable is usually measured on a scale ranging from liberal (or left) to conservative (or right). Indeed, previous comparative research on the bureau voting theory has often focused attention on differences between public-sector employees and other citizens on the liberal-conservative continuum (Blake, 1991; Jensen et al., 2009). Individuals' ideological positions is viewed as a major predictor of political behavior and attitudes, and it is not surprising that

scholars would focus some attention on differences between government employees and other individuals on this important political attitude.

In Table 3 we report the results of difference-of-means tests and the public-sector employment coefficients obtained from multivariate models of liberal-conservative ideology. Because ideological orientations are measured in all of the data sets used in our study and for all countries, we are able to present comparative empirical results relating to our hypothesis that government employees will stake out more liberal positions than other individuals.

As one can see, there is considerable support for this component of the bureau voting theory. In most cases the results of both the bivariate and multivariate analyses reveal a significant government employment effect, with government employees more liberal than other individuals. Turning first to the United States, we find that there is a discernible bivariate public-sector employment effect in 2004, but not in 2008. Government employees are significantly more liberal on both the traditional 7-point liberal-conservative ideology and 10-point left-right scales in 2004, but there is no significant bivariate effect of government employment in 2008. However, the opposite conclusion is reached when one inspects the results of our multivariate analysis. In 2004 the bivariate effect of government employment on ideology disappears once we control for the effects of other independent variables, but in 2008 the null bivariate effect turns into a significant government employment coefficient in the multivariate model ($b = 3.00$, $t = 3.49$). The pattern in Canada in 2008 is closer to the pattern in the United States in 2004; there is a significant difference on the left-right scale for public-sector employees and other citizens, but this difference is reduced to nonsignificance once we control for the effects of other independent variables.

Using WVS and ISSP data, we are also able to estimate the ideological differences for government employees and other individuals for a number of western industrial democracies. Turning to the comparative data in Table 3, we find strong bivariate and multivariate effects of government employment on liberal-conservative ideology in both the WVS and ISSP data. First, for the nine WVS countries included

in our analysis, public-sector employees are significantly more liberal than their peers in seven of the nine countries. The sole exceptions are the United States and Finland. The largest differences between government employees and other citizens are found among respondents from Norway, Sweden, and Switzerland. When we examine the effects of government employment in a multivariate model that includes several relevant control variables, we again find that the effect is significant and in the expected direction in seven of nine countries, with the exceptions being the United States and Germany. We also pool the data for all countries together to estimate the bivariate difference in ideological orientations for government employees and other individuals, both with and without fixed effects; here we find that there is a strong and significant government employment effect ($b = -0.461$, $t = -10.25$) that increases in a model that includes country fixed effects ($b = -0.519$, $t = -11.41$).

The pattern that we observe for the 14 countries from the 2006 ISSP survey is very similar. The coefficient for government employment is negative and statistically significant in the bivariate models for 12 of the 14 countries, indicating that government employees are significantly less like than other individuals to stake out the conservative position. Moreover, the government employment effect continues in a multivariate model for one-half of the ISSP countries. As is the case for the WVS data, we also estimate a pooled model with and without country fixed effects; in both cases the differences between government employees and other citizens is in the expected (negative) direction and highly significant.

We also perform a more rigorous test of this component of the bureau voting theory by pooling the data for all countries and estimating a full model that includes all of our core independent variables, as well as country fixed effects. The WVS results are reported in Table 4, while the ISSP results are reported in Table 5. In the first columns in these two tables are presented the results from a simple additive model, with liberal-conservative ideology depicted as a function of our government employment variable, union membership, and other control variables; in the second column in Table 4 we include an interaction

between government employment and union membership to assess the degree to which public-sector unionized employees differ in their left-right positions from nonunionized public-sector employees and other citizens. As one can readily see, government employees are significantly less conservative than other citizens in both the WVS data ($b = -0.382$, $t = -7.83$) and the ISSP data ($b = -0.146$, $t = -7.35$). Simply, public-sector employees in western industrial democracies typically place themselves to the left of other citizens on the ideological left-right spectrum. We also can ascertain the degree to which public-sector employees move in an even more liberal direction if they are unionized. The effect of public-sector unionization is captured by the interaction for government employment and union membership. As one can see, in the WVS data the coefficient for the interaction variable fails to achieve conventional levels of statistical significance, indicating that unionized and nonunionized public-sector employees are equally more liberal than individuals who are not government employees. Simply, unionization and government employment both move individuals to the ideological left, but there is not an extra premium for being both unionized and a government employee.

Spending attitudes. Both the ANES and CES surveys include items relating individuals' spending and/or taxation preferences. Given the role of spending attitudes in most discussions of the bureau voting theory, it is important to test this component of the bureau voting theory using survey data on spending and taxation preferences.

In Table 6 we report simple difference-in-means and multiple regression (or logit) results for a variety of spending and taxation items from the 2008 and 2004 ANES surveys, as well as from the 2008 CES survey. Turning first to the American data, we find that there is no better than an inconsistent pattern of bivariate results that support the bureau voting theory. Based on data from the 2004 ANES, we find that for only two of eleven spending items is there a significant difference in spending preferences between public-sector employees and other citizens. Government employees are more supportive of increased spending on public schools ($b = 0.777$, $t = 1.86$) and science and technology ($b = 0.551$, $t = 2.27$); however,

while most of the remaining coefficients are positive, none achieve conventional levels of statistical significance. Further, we find that government employees have significantly lower scores on a seven-point defense spending scale ($b = -0.241$, $t = -2.10$). In the area of taxes, government employees are much less supportive of the Bush tax cuts ($b = -0.558$, $t = -5.47$), and they are significantly less likely to perceive that the rich pay too much in taxes and significantly more likely to perceive that the poor pay too much in taxes. On the revenue side, government employees generally hold attitudes consistent with the bureau voting theory, but the overall picture drawn from the 2004 ANES data is mixed at best. It is worth noting that none of the government employment coefficients are statistically significant in the multivariate spending models, though there are significant negative coefficients for this variable in the models for support for the Bush tax cuts and perceptions of the tax burden for the rich.

The results for 2008 provide equally equivocal support for the bureau voting theory. As is the case for 2004, public-sector employees are more likely to support increased spending on public schools and science and technology, and there is some evidence that government employees stake out a significantly higher position on one version of the seven-point government spending scale. The positive effect of government employment on public school spending is also observed in the multivariate model, though none of the other coefficients for this variable are statistically significant once the effects of other variables are taken into account. Ultimately, there is relatively little empirical support in the 2008 ANES for the government spending component of the bureau voting theory.

The story from the Canadian data is quite different. Canadian government employees are significantly more likely to support increased spending on three of the four domestic spending items—i.e., health care, education, and the environment—though they are less supportive of increases in defense spending. On taxes, public-sector employees in Canada are no different than other citizens in supporting increased personal income taxes, but they are considerably (and significantly) more likely to support increased corporate income taxes ($b = 0.114$, $t = 3.56$). It appears that Canadian government employees support

increased domestic spending and at least some revenue enhancements through increased corporate income taxes.

Taken as a whole, we find some support for the attitudinal component of the bureau voting theory. Government employees are generally more likely to take a liberal position on a liberal-conservative scale; given the primacy of this variable in models of political behavior and attitudes, it would seem that government employees start off with a general disposition that leads them to behaviors or other attitudes that reflect a more liberal mindset. The evidence for other kinds of attitudes is somewhat mixed, but there is enough evidence that is consistent with expectations from the bureau voting theory to suggest that government employees are, indeed, more liberal in their orientations than other citizens.

Are government employees more likely to turn out to vote than other individuals?

In terms of behavior, one of the strongest predictions from the bureau voting theory is that government employees are more active in electoral politics and hence more likely to cast votes in elections. The general idea is that high-turnout public-sector employees enter the electorate in larger numbers than other citizens, and this consequently magnifies their electoral and (subsequently) policy influence. There has been considerable empirical evidence to support the hypothesis that government employment is positively related to voter turnout (Garand et al., 1991; Corey and Garand, 2002; Jensen et al, 2009).

In Table 7 we present results from our difference-in-mean proportion tests and multivariate models of voter turnout and turnout intention. We find strong evidence to support the assertion that public-sector employees are more likely than others to turn out to vote. For the United States, in both 2004 and 2008 government employees are more likely to cast a vote, and in the 2008 pre-election survey they are more likely to express with certainty that they will vote in the upcoming election. Canada in 2008 is a bit of an exception; there is little evidence that government bureaucrats are more likely to turn out to vote in the 2008 Canadian elections. However, when we turn to the 2006 ISSP data, we find that for most countries—

including, ironically, Canada—individuals who report that they work for the public sector are more likely to turn out than other individuals. We observe significantly higher turnout rates for government employees in 9 of 13 countries—Australia, Canada, France, Germany, Ireland, New Zealand, Norway, Switzerland, and the United States. Of course there is some variation in the magnitude of the effect of government employment on turnout, ranging up to 15.2% in the United States and 12.5% in Switzerland, and there are some countries for which there are no turnout differences between public-sector employees and other individuals (i.e., Denmark, Finland). We also compare the mean turnout rates for government employees and others for our pooled sample. We find that across all countries government employees are about 5.7% more likely to turn out to vote than other individuals, and this effect is diminished to 5.3% when we include country fixed effects. On the whole it appears that government employees are significantly more likely to cast votes than other citizens.

Interestingly, when we estimate a series of multivariate logit models for each country using the ISSP data, none of the government employment coefficients achieves statistical significance. What appears to be a strong government employment effect in bivariate analyses is transformed into a null effect in the multivariate models. This would seem to indicate that higher turnout among government employees is not due to government employment per se but rather reflects other variables that are associated with both government employment and turnout.

In Tables 8 and 9 we present results from full models of voter turnout, estimated using WVS data (Table 8) and ISSP data (Table 9). In both instances we include government employment as our primary independent variable, along with a set of control variables and country fixed effects. A more comprehensive set of independent variables is included in the models estimated using WVS data. Moreover, in the second model in Table 8 we include an interaction for government employment and union membership to consider whether public-sector union members are more likely to turn out to vote than public-sector non-union members, private-sector union members, or other individuals.

Based on the results in Tables 8 and 9, we find that government employment has a modest effect on turnout, once the effects of other control variables are taken into account. For the 2005 WVS, the coefficient for government employment is relatively small, though it is just above standard levels of statistical significance ($b = 0.152$, $t = 1.74$). This coefficient translates in a marginal effect of being a government employee of only 0.0142, which is not a large effect at all. The strong effect of government employment on turnout is diminished by about 75% by the inclusion of additional control variables. Moreover, in the second model in Table 8 we find little evidence that public-sector employees differ in their turnout levels depending on whether or not they are unionized. The coefficient for the interaction between union membership and government employment is small and nonsignificant ($b = -0.031$, -0.25).

We estimate a similar—but somewhat less comprehensive—turnout model in Table 9 using ISSP data, and our results are comparable. The coefficient for turnout is positive and statistically significant ($b = 0.249$, $t = 2.74$), but here again this translates into a marginal effect of being a government employee of only 0.0162. Based on the WVS and ISSP results, we suggest that the effect of government employment on voter turnout is due primarily to the effects of other variables that are also related to government employment, though a small residual direct effect of government employment remains.

The bottom line is that it appears that government employees are, in most countries and overall, more likely to vote in elections than other citizens. The *source* of the government employment effect is less clear, though it appears that it is largely driven by the fact that government employees have other attributes that predispose them to higher turnout rates above and beyond their occupational status.

Are government employees more likely to vote for liberal parties and candidates?

The third major component of the bureau voting theory suggests that government employees will be more likely to lend their electoral support to liberal parties and candidates. It is liberal parties and candidates that are likely to adopt policy positions that favor an expanded public sector and more active government and that will, hence, be more generous to public-sector employees (Blais, Blake, and Dion,

1997). Given this, we would expect government employees to demonstrate a greater propensity to vote for (or express an intention to vote for) liberal parties and candidates.

We begin with data from the 2004 and 2008 ANES surveys. In Table 10 we report the proportion of government employees and other citizens who voted for the Republican candidate for president, U.S. House, and U.S. Senate in the 2004 and 2008 elections. Because the dependent variable is measured in the Republican direction, we posit that the coefficients reported in this table will be negative, indicating that government employees are less likely to support Republican candidates. As one can readily see, there is strong support for this hypothesis. In 2004, only 34.4% of government employees supported George Bush for president, compared to 55.4% of other citizens; this 21% difference is highly significant ($t = -5.05$). We also find that public-sector employees are more likely than other citizens to vote for Republican House candidates ($b = -0.155$, $t = -3.48$) and Republican Senate candidates ($b = -0.114$, $t = -2.10$). For 2008, the differences in voting behavior for government employees and other citizens are not quite as stark, though there is a government employment effect for both presidential voting ($b = -0.064$, $t = -1.83$) and House voting ($b = -0.116$, $t = -3.09$). We note, however, that any government employment effects disappear in a full multivariate logit model, suggesting that there is not anything intrinsic about government employment *per se* that creates the greater propensity of government employees to vote for Democratic candidates. Rather, the occupational voting gap appears to be due to the effects of other variables such as partisanship, ideology, and demographic and socioeconomic attributes.

For Canada, we have data from the 2008 CES, and we again find some support for the vote choice component of the bureau voting theory. Government employees are significantly less likely to report that they voted for the Conservative Party in 2008, and they are more likely to have voted for the New Democratic Party (NDP), Bloc Quebecois, and the Green Party. The χ^2 value for voting differences is highly significant ($\chi^2 = 20.08$, $\text{prob} < 0.001$). We also report results from a multinomial logit model that includes government employment and other control variables as independent variables. Here we find that the

differences between government employees and other citizens disappear in the face of statistical controls, as is the case for the United States.

We can also test this component of the bureau voting theory using comparative cross-national survey data. The WVS includes a vote intention question:

If there were a national election tomorrow, for which party on this list would you vote? Just call out the number on this card. If you are uncertain, which party appeals to you most?

Based on responses to this question in each of eight countries for which this question was asked in the WVS, we code a nominal vote intention variable. We compare the distribution of party vote preferences for government employees and other citizens in each country, and we also estimate a multinomial logit model that includes government employment and other control variables. We use the most comparative major party, as determined by mean ideological positions for individuals who state a preference for each respective party, as the baseline category in our multinomial logit model.

The results from these analyses are presented in Table 12. As one can see, there is considerable evidence that government employees differ from other citizens in their party vote intention preferences. For six of the eight countries, there is a significant difference in vote preferences for public-sector employees and other citizens. In Australia, government employees are much less likely to support the Liberal Party and more likely to support the Australian Labor Party and the Greens; taken as a whole, these differences are statistically significant ($\chi^2 = 32.40$, prob < 0.001). In Canada respondents who are employed in the public sector are considerably less likely to support the Liberal and Progressive Conservative parties but are more likely to express a voting preference for the NDP and Bloc Quebecois; here again, these differences are statistically significant ($\chi^2 = 19.59$, prob < 0.001). In Finland most of the differences for particularly political parties are small, but collectively these differences achieve conventional levels of statistical significance. Specifically, by a margin of 17.4% to 9.8%, public sector employees are more likely than other citizens to lend electoral support to the Green League. In Norway, there are several discernible

differences in the party vote intentions of public-sector employees and others ($\chi^2 = 50.74$, prob < 0.001). The former are more likely to support the Socialist Left Party (16.2% to 6.3%) and the Labour Party (38.4% to 32.8%) and are less likely to support the Progressive Party (14.5% to 21.8%) and the Conservative Party (12.5% and 21.4%). Similarly, in Sweden government employees differ significantly in their distribution party vote intentions ($\chi^2 = 37.03$, prob < 0.001). Swedish government employees are more likely to support the Social Demokraterna (37.4% to 31.0%) and Vansterpartiet (10.3% to 3.5%) but are much less likely to support the Moderata Samlingspartiet (19.9% to 36.6%). Finally, there are significant differences in the distribution of party vote intentions between government employees and other citizens in Switzerland ($\chi^2 = 27.58$, prob < 0.001). Swiss public-sector bureaucrats are more likely to state a vote preference for the Grune Partei (22.2% to 12.7%) and the Sozial Demokratische Partei (27.3% to 23.0%) but are less likely to prefer the Schwizerische Volkspartei (9.5% to 19.9%) and the Freisinning-Demokratische Partei (17.7% to 22.1%).

The only two countries for which there is not a difference between government employees and other citizens Germany and the United States. In these two cases there are minor differences in party vote intentions, but they are not of sufficient magnitude to achieve standard significance levels.

In the final two columns of Table 12 we report the multinomial logit coefficients for the government employment variable in each country. Once we control for the effects of other variables related to party vote intentions, we find that differences between government employees and other citizens disappear in some cases and not in others. Indeed, for five of the eight countries in our analysis, there is at least one significant multinomial logit coefficient for the government employment variable. For instance, in Australia there are strong, significant government employment effects even after one controls for other variables related to vote choice; in comparison to the Liberal Party, the (excluded) baseline category, government employees are more likely to vote for more liberal parties the Australian Labour Party ($b = 0.645$, $t = 3.41$), the National Party ($b = 0.793$, $t = 1.74$), the Greens ($b = 0.896$, $t = 3.23$), the Australian Democrats ($b =$

0.815, $t = 2.14$), and One Nation ($b = 1.383$, $t = 2.66$). For Canada, Norway, Sweden, and Switzerland, government employees are more likely than other individuals to support at least one party over the most conservative major party. On the other hand, for Finland, Germany, and the United States, none of the coefficients for the government employee variable achieve statistical significance.

The bottom line is that government employees tend to support more liberal political parties and candidates. The empirical evidence to support this claim is not uniform—in some political systems or specific elections this expected pattern is not observed. However, there are enough differences in the voting behavior of public-sector employees and other citizens to suggest support for this component of the bureau voting theory. Simply, in most cases government employees are more predisposed to support liberal parties and candidates than are other citizens.

CONCLUSION

The purpose of this paper is to conduct a reassessment of the degree of empirical support for the bureau voting theory. As noted, this theory attributes growth in the size of government to the pursuit of increased spending by self-interested government bureaucrats who further their personal and policy goals through the electoral arena. The bureau voting theory contends that government employees are more liberal in their attitudes, more likely to vote in elections, and more likely to cast their votes for liberal candidates who will support an expanded public sector. The candidates who benefit from having the support of this relatively liberal, high participation group become strong supporters of growth in the size of the public sector, and subsequently government activity and budgets increase over time. This theory can be contrasted with Niskanen's bureau information monopoly theory, a close cousin that portrays government growth as a function of the willingness of self-interested bureaucrats to use their monopoly of information in institutional settings to persuade elected officials to support larger budgets.

With a few notable exceptions, much of the research finding support for this theory was conducted during the 1990s (Garand, Parkhurst, and Seoud, 1991; Blais and Dion, 1991). In our view it is important to

reevaluate empirical support for this theory in light of the availability of more recent data appropriate for testing the basic contours of the theory. We use data from the American National Election Study (2004 and 2008), the Canadian Election Study (2008), the World Values Survey (2005), and the International Social Survey Programme survey (2006) to provide a comparative test of this theory across up to 16 countries.

Based on our review of the empirical evidence, we can say that the bureau voting theory stands up very well to additional empirical scrutiny. Simply, there is sufficient empirical evidence to support all three components of the theory. First, government employees are generally more likely to hold attitudes that are more liberal than those held by other citizens. Public sector employees are more likely to place themselves to the left of their fellow citizens on the liberal-conservative (left-right) scale; this finding is consistent across political systems, with just a few exceptions. In the United States, government employees are more likely to be Democratic identifiers, disapprove of the job performance of Republican presidents, and evaluate Democratic politicians and the Democratic Party more favorably (and Republican politicians and the Republican Party less favorably). The evidence on spending attitudes in the United States is less consistently compatible with the bureau voting theory, though in Canada government employees are consistently more likely than other citizens to support increased spending and taxes. We also estimate multivariate models of liberal-conservative ideology using two cross-national datasets, and in both cases we find that government employees are significantly less conservative than their fellow citizens, even controlling for the effects of other variables and country fixed effects. Moreover, the effect is widespread across countries, with most countries exhibiting a government employment effect for the liberal-conservative scale. Overall, it appears that the attitudinal component of the bureau voting theory has considerable empirical support behind it.

Turning to voter turnout, here again we find strong support for this element of the bureau voting theory. In most countries government employees are more likely than other individuals to report that they turned out in the most recent election or that they intend to vote in the next election. The effect of

government employment on turnout is typically diminished once the effects of other control variables are taken into account, but in our pooled models using all relevant countries in the WVS and ISSP datasets we still find a small, but significant public-sector employment effect. In general it appears that most of the considerable differences in turnout rates for government employees and other individuals are explained by differences in other attitudinal, socioeconomic, and demographic attributes.

For vote choice, we also find fairly strong evidence that government employees are more likely to cast votes for parties and candidates that are on the liberal side of the ideological spectrum. In most countries there is a discernible government employment effect on vote choice, with government employees showing a greater propensity than other citizens to oppose conservative parties and candidates and support their more liberal counterparts. These effects often remain in multivariate models that include a variety of control variables.

What do we not know?

The research findings reported in this paper go a long way toward confirming previous empirical support for the bureau voting theory. Yet there is a great deal that we still do not know about this theory and the processes that underlie it. What are the remaining unanswered questions in this research stream?

First, while we find general support for the three components of the bureau voting theory, the level of empirical support for this theory is not uniform across countries and time. What explains this spatial and temporal variation in the applicability of the bureau voting theory? For instance, in looking at the government employment effect on liberal-conservative ideology, we find support for the hypothesis for most countries but not all. Why should government employees in Canada, Australia, Norway, and Sweden stake out a consistently more liberal position than other citizens, while in the United States, Finland, Germany, and the Netherlands a similar pattern is not observed. Moreover, we find that government employees in the United States differ from their fellow citizens in terms of political attitudes in 2004, but the observed differences in 2008 are typically smaller and, in several cases, fail to achieve statistical

significance. What explains variation in the government employment effect on political attitudes, turnout, and vote choice across countries and across time? To be fair, we do include country fixed effects in our pooled models, but this is no substitute for careful theoretical thinking about the sources of variation in government employment effects. Is there something about differences in the meaning of government bureaucratic service across different countries? Does variation in how government employees are selected have an effect? Are there other institutional or cultural factors that influence the relationship between public-sector employment and political attitudes and behavior?

Second, we would be the first to admit that previous research on the bureau voting theory has been based on the rather crude survey instrument that simply differentiates government employees from other citizens in binary fashion. This is clearly an oversimplification of the world. Public-sector employees are not monolithic; rather, they differ in many important ways—e.g., the agencies or departments for which they work, the level of government (i.e., federal, state, local), their occupational prestige, educational and other qualifications. To place all types of government employees into one category prevents scholars from developing more detailed, nuanced interpretations and tests of the bureau voting theory. There may be general expectations drawn from the bureau voting theory that applies to all or most government bureaucrats, but there may also be other expectations that are specific to more detailed categories of bureaucrats. For instance, public school teachers may have stronger views toward spending on public education than, say, someone working for the federal Environmental Protection Agency, who may actually be more concerned about spending on the environment. In addition, bureaucratic self-interest may not be limited to individuals who currently work for the public sector. It is possible that individuals who have retired from government service (and who have hence had some of the same socialization experiences as current government employees) or who have a spouse or other close family member working for the public sector will behave in a similar way as current public-sector employees. It is important for scholars to

develop more detailed survey instruments that measure various aspects of government employees' work experiences and other attributes related to their self-interest.

Third, considerably more work is needed on the competing processes that can create differences between government employees and other citizens. We have already mentioned self-selection and socialization, which represent two possible processes that generate the government employment effect. Do public sector employees differ from other citizens because the agencies and departments for which they work socialize or indoctrinate them into a perception of self-interest that results in a specific set of attitudes and behaviors? Or are different kinds of individuals (i.e., liberals, advocates of active government, those with a strong sense of political participation or policy activism) drawn to government employment? Or is there a combination of these two processes at work? We have tried to provide an indirect test of these two alternate processes by estimating multivariate models that include a wide range of control variables, including variables that represent long-standing attitudes and socioeconomic / demographic attributes. Yet such tests are only indirect and are a poor substitute for conducting a longitudinal analysis of individuals prior to the start of their career work lives. For instance, are high school seniors who eventually become government employees somehow different than high school seniors who pursue other career paths in the private or non-profit sectors? Or are future government employees a random draw from the population of high school seniors and develop their left-leaning attitudes and behavior when they are socialized by their employing agencies? We contend that creating a definitive picture of the processes that generate differences between government employees and other individuals requires the development of a longitudinal research design that tracks individuals from their pre-employment to employment periods.

Finally, little is known about the working mechanisms underlying how bureau voting theory is translated into political outcomes. If government employees are more likely to hold liberal attitudes, cast votes in elections, and vote for liberal candidates, how does this matter? How, exactly, do bureaucrats use

the electoral process to influence public spending and government policy making and, subsequently, increase the size of the public sector? For instance, we are intrigued by the possibility that government employees represent a relatively coherent interest that can affect the behavior of elected officials through their ideological or policy positions, their greater propensity to vote, and their greater likelihood of voting for liberal candidates who are more likely to support an active government. A case in point is the work of Blair (2003), who explores the degree to which the roll-call behavior of U.S. House members is affected by the presence of government employees in their districts. Blair finds that House members are significantly less likely to exhibit spending constraint as the percentage of government employees in their congressional districts increases. We suggest that this finding is consistent with the bureau voting theory, insofar as it appears that House members shift their behavior in a pro-spending direction as government employees represent a larger share of their district electorates. This is the kind of extension of the bureau voting theory that is important to consider in future research.

ENDNOTES

1. Hereafter we use public-sector employees, government employees, and (government) bureaucrats interchangeably.

Table 1. Difference in means for government employees and other respondents on various political attitudes in the United States, American National Election Study (2004 and 2008)

Variable	Means		Difference	T-ratio	Multiple Regression/Logit Results		
	Government Employees	Others			b	t-ratio	
American National Election Study (2004)							
Partisan identification	2.291	3.015	-0.724	-4.79***	-0.373	-2.81**	
Presidential approval (general)	1.134	1.551	-0.417	-4.38***	-0.208	-1.17	
Presidential approval (economy)	0.960	1.305	-0.345	-3.74***	-0.145	-0.86	
Presidential approval (foreign)	1.000	1.358	-0.358	-3.69***	-0.092	-0.51	
Presidential approval (deficit)	0.778	1.003	-0.225	-2.61**	0.002	0.01	
Presidential approval (terror)	1.224	1.701	-0.477	-4.89***	-0.281	-1.63	
Country on right track	0.296	0.417	-0.120	-3.34**	-0.193	-0.93	
Congressional approval	1.483	1.405	0.078	0.93	0.413	2.63**	
American National Election Study (2008)							
Partisan identification	2.399	2.764	-0.365	-2.89**	-0.488	-4.19***	
Country on right track	0.101	0.097	0.004	0.24	0.343	1.44	
Presidential approval (general)	0.741	0.821	-0.080	-1.24	0.079	0.48	
Presidential approval (economy)	0.623	0.618	0.003	0.06	0.232	1.41	
Presidential approval (foreign)	0.878	0.944	-0.066	-0.91	0.209	1.31	
Presidential approval (environment)	1.075	1.086	-0.011	-0.15	0.344	2.25*	
Presidential approval (health)	0.709	0.821	-0.112	-1.65*	-0.141	-0.88	
Presidential approval (Iraq)	0.885	0.893	-0.008	-0.11	0.176	1.03	
Congressional approval	1.006	0.879	0.128	1.94*	0.172	1.19	

***prob < 0.001 ** prob < 0.01 * prob < 0.05

Table 2. Difference in means for government employees and other respondents on feeling thermometers in the United States, American National Election Study (2004 and 2008)

Variable	Means		Difference	T-ratio	Multiple Regression/Logit Results		
	Government Employees	Others			b	t-ratio	
American National Election Study (2004)							
Feeling thermometer: George W. Bush	45.797	57.117	-11.320	-4.66***	-1.715	-0.91	
Feeling thermometer: John Kerry	59.190	51.534	7.656	3.99***	2.013	1.29	
Feeling thermometer: Ralph Nader	42.716	42.938	-0.122	-0.07	1.064	0.54	
Feeling thermometer: Dick Cheney	42.005	51.324	-9.219	-4.41***	-2.209	-1.19	
Feeling thermometer: John Edwards	62.976	53.662	9.314	4.99***	4.845	2.93**	
Feeling thermometer: Democratic Party	65.820	56.581	9.239	5.24***	3.628	2.64**	
Feeling thermometer: Republican Party	47.566	54.597	-7.031	-3.55***	-0.019	-0.01	
American National Election Study (2008)							
Feeling thermometer: George W. Bush	38.808	40.670	-1.862	-1.03	2.941	1.80	
Feeling thermometer: Barack Obama	61.668	57.250	4.418	2.57**	0.511	0.33	
Feeling thermometer: John McCain	51.246	51.897	-0.651	-0.42	1.568	1.11	
Feeling thermometer: Joe Biden	56.036	52.673	3.363	2.09*	-0.123	-0.08	
Feeling thermometer: Sarah Palin	51.045	52.948	-1.904	-1.01	0.921	0.53	
Feeling thermometer: Democratic Party	60.075	56.695	3.380	2.18*	0.521	0.41	
Feeling thermometer: Republican Party	47.098	47.845	-0.747	-0.48	1.300	0.98	

***prob < 0.001 ** prob < 0.01 * prob < 0.05

Table 3. Difference in means for government employees and other respondents on liberal-conservative ideology in various countries, various data sets

Variable	Means		Difference	T-ratio	Multiple Regression Results	
	Government Employees	Others			b	t-ratio
American National Election Study (2004)						
United States	3.045	3.321	-0.276	-2.72**	-0.018	-0.20
United States (Left-right scale)	5.368	5.949	-0.582	-3.05***	-0.073	-0.40
American National Election Study (2008)						
United States	3.230	3.242	-0.012	-0.12	0.300	3.49***
Canadian Election Study (2008)						
Canada	4.761	5.247	-0.485	-3.73***	-0.337	-1.51
World Values Survey (2005)						
United States	5.556	5.731	-0.174	-1.02	-0.148	-0.83
Italy	4.781	5.169	-0.389	-1.91*	-0.511	-2.14*
Canada	5.021	5.496	-0.475	-3.62***	-0.306	-1.96*
Australia	5.126	5.665	-0.435	-4.55***	-0.425	-3.36***
Norway	5.172	5.887	-0.715	-5.93***	-0.490	-3.78***
Sweden	5.126	5.893	-0.766	-5.39***	-0.689	-4.91***
Finland	5.527	5.621	-0.084	-0.57	-0.349	-2.10*
Switzerland	4.654	5.359	-0.705	-5.32***	-0.594	-3.51***
Germany	4.423	4.847	-0.423	-3.85***	-0.119	-1.01
All countries	5.000	5.461	-0.461	-10.25***		
All countries (with fixed effects)			-0.519	-11.41***		

Table 3 (continued)

Variable	Means		Difference	T-ratio	Multiple Regression Results	
	Government Employees	Others			b	t-ratio
International Social Survey Programme (2006)						
Australia	-0.111	0.068	-0.179	-3.98***	-0.088	-1.76*
Canada	0.066	0.165	-0.099	-1.79*	-0.005	-0.06
Denmark	-0.361	0.165	-0.526	-6.68***	-0.436	-5.14***
Finland	-0.172	0.012	-0.184	-3.25***	-0.196	-3.07***
France	-0.435	-0.164	-0.271	-3.95***	-0.278	-2.50**
Germany	-0.253	-0.154	-0.995	-1.15	-0.119	-1.17
Ireland	-0.079	-0.047	-0.032	-1.67*	-0.028	-1.06
Netherlands	-0.324	-0.186	-0.138	-1.11	-0.060	-0.47
New Zealand	-0.019	0.130	-0.149	-1.91*	-0.035	-0.41
Norway	-0.124	0.228	-0.353	-6.01***	-0.236	-3.63***
Sweden	-0.362	-0.230	-0.131	-2.34**	-0.100	-1.65*
Switzerland	0.020	0.152	-0.132	-2.40**	-0.050	-0.80
United Kingdom	-0.181	-0.045	-0.136	-1.95*	-0.064	-0.81
United States	-0.154	-0.065	-0.089	-1.82*	-0.245	-2.61**
All countries	-0.195	-0.005	-0.190	-11.13***		
All countries (with fixed effects)			-0.198	-11.51***		

*** prob < 0.001 ** prob < 0.01 * prob < 0.05

Table 4. OLS regression estimates, full model of liberal-conservative ideology, nine western democracies, 2005 World Values Survey

Variable	Model (1)		Model (2)	
	b	t	b	t
Government employment	-0.382	-7.83***	-0.341	-5.66***
Union membership	-0.350	-10.40***	-0.329	-7.93***
Government employment * union membership	---	---	-0.076	-1.16
Age	-0.018	-2.62**	-0.018	-2.62**
Age ²	0.0002	3.07**	0.0002	3.06**
Education	-0.068	-6.21***	-0.068	-6.20***
Religiosity	0.264	5.61***	0.265	5.63***
Church attendance	0.102	8.40***	0.102	8.38***
Income decile	0.071	7.69***	0.072	7.72***
Upper class	0.808	4.08***	0.809	4.08***
Upper middle class	0.446	5.14***	0.447	5.16***
Lower middle class	0.231	2.86**	0.231	2.86**
Working class	0.102	1.24	0.102	1.24
Italy	-0.768	-7.68***	-0.771	-7.71***
Canada	-0.193	-2.52*	-0.192	-2.51*
Australia	0.105	1.29	0.102	1.25
Norway	0.396	4.53***	0.394	4.51***
Sweden	0.399	4.47***	0.394	4.41***
Finland	0.246	2.79**	0.241	2.74**
Switzerland	-0.444	-5.29***	-0.448	-5.33***
Germany	-0.788	-10.42***	-0.790	-10.45***
Intercept	5.457	29.30***	5.449	29.23***
N	9455		9455	
R ²	0.093		0.093	
F	48.06		45.84	
Prob(F)	0.000		0.000	

***prob < 0.001 ** prob < 0.01 * prob < 0.05

Table 5. OLS regression estimates for full model of liberal-conservative ideology, 14 western democracies, 2006 International Social Survey Programme (ISSP) survey

Variable	b	t
Government employment	-0.146	-7.35***
Union membership	-0.350	-10.40***
Age	-0.012	-3.72** *
Age ²	0.0001	4.54***
Education	-0.007	-1.17
Married	0.096	5.30***
Church attendance	0.046	10.82***
Employment status	0.104	4.71***
Family income (U.S. dollars)	0.000002	8.60***
Australia	0.279	8.45***
Canada	0.327	7.13***
Denmark	0.337	8.04***
Finland	0.312	6.73***
France	-0.050	-0.92
Germany	0.055	1.40
Ireland	0.061	1.41
Netherlands	0.057	1.35
New Zealand	0.340	7.61***
Norway	0.411	9.90***
Sweden	0.123	2.90**
Switzerland	0.264	6.18***
United Kingdom	0.191	4.45***
N		12036
R ²		0.072
F		42.19
Prob(F)		0.000

***prob < 0.001 ** prob < 0.01 * prob < 0.05

Table 6. Difference in means for government employees and other respondents on spending attitudes in the United States (2004, 2008) and Canada (2008), various data sets

Variable	Means		Difference	T-ratio	Multiple Regression/Logit Results	
	Government Employees	Others			b	t-ratio
American National Election Study (2004)						
Government spending scale	3.606	3.493	0.113	0.92	-0.037	-0.30
Defense spending scale	3.378	3.620	-0.241	-2.10*	-0.041	-0.36
Spending on highways	0.341	0.283	0.057	1.29	0.255	1.60
Spending on Social Security	0.645	0.577	0.068	1.64	0.288	1.61
Spending on public schools	0.777	0.704	0.073	1.86*	0.119	0.54
Spending on science and technology	0.551	0.448	0.104	2.27*	0.225	1.37
Spending on crime	0.627	0.638	-0.012	-0.29	0.065	0.38
Spending on welfare	-0.022	-0.102	0.081	1.50	0.109	0.72
Spending on child care	0.568	0.528	0.040	0.88	0.070	0.39
Spending on foreign aid	-0.296	-0.333	0.037	0.73	0.009	0.06
Spending on aid to the poor	0.478	0.490	-0.011	-0.24	-0.149	-0.85
Spending on border security	0.554	0.596	-0.042	-0.95	0.108	0.62
Spending on terrorism prevention	0.181	0.265	-0.083	-1.54	-0.023	-0.15
Support for Bush tax cuts	0.306	-0.252	-0.558	-5.47***	-0.448	-2.90**
Tax burden: personal	0.262	0.337	-0.075	-1.72*	-0.251	-1.54
Tax burden: the poor	0.460	0.361	0.099	2.10*	0.169	1.03
Tax burden: the rich	-0.659	-0.488	-0.170	-3.38***	-0.436	-2.33**
American National Election Study (2008)						
Government spending scale (1)	3.621	3.341	0.280	1.79*	0.061	0.36
Government spending scale (2)	3.398	3.430	-0.032	-0.20	0.067	0.40
Defense spending scale (1)	3.038	3.251	-0.213	-1.41	0.124	-0.13
Defense spending (2)	2.626	2.829	-0.203	-1.41	-0.010	-0.06
Spending on highways	3.888	3.869	0.019	0.23	0.085	0.60
Spending on Social Security	4.518	4.518	0.001	0.01	0.035	0.25

Table 6 (continued)

Variable	Means		Difference	T-ratio	Multiple Regression/Logit Results	
	Government Employees	Others			b	t-ratio
American National Election Study (2008) (continued)						
Spending on public schools	5.066	4.721	0.344	3.85***	0.437	2.97**
Spending on science and technology	4.290	4.086	0.204	2.23*	0.054	0.41
Spending on crime	4.382	4.419	-0.037	-0.41	0.101	0.75
Spending on welfare	3.030	2.924	0.106	1.02	-0.113	-0.85
Spending on child care	4.211	4.195	0.016	0.17	-0.047	-0.33
Spending on foreign aid	2.141	2.099	0.043	0.45	-0.116	-0.84
Spending on aid to the poor	4.254	4.232	0.022	0.24	-0.149	-1.10
Spending on border security	4.127	4.256	-0.129	-1.20	0.112	0.84
Spending on terrorism prevention	3.047	3.261	-0.213	-1.86*	-0.014	-0.11
Spending on the environment	4.409	4.388	0.022	0.23	-0.104	-0.77
Overall spending scale	46.911	47.346	0.435	0.75	0.012	0.02
Domestic spending scale	37.372	39.410	0.658	1.33	0.036	0.07
Progressive taxes	0.523	0.539	-0.016	-0.49	-0.224	-1.44
Canadian Election Study (2008)						
Spending on defense	-0.088	0.022	-0.110	-3.13***	0.128	1.32
Spending on welfare	0.039	0.048	-0.009	-0.28	0.222	2.45**
Spending on health care	0.798	0.750	0.048	2.23*	-0.130	-2.09*
Spending on education	0.789	0.696	0.093	4.15***	-0.049	-0.78
Spending on the environment	0.665	0.607	0.057	2.17*	0.077	1.12
Personal income taxes	-0.303	-0.326	0.023	0.88	-0.113	-1.54
Corporate income taxes	0.434	0.319	0.114	3.56***	0.121	1.48

***prob < 0.001 ** prob < 0.01 * prob < 0.05

Table 7. Difference in means for government employees and other respondents on voter turnout in various countries, various data sets

Variable	Means		Difference	T-ratio	Multiple Regression/Logit Results	
	Government Employees	Others			b	t-ratio
American National Election Study (2004)						
United States	0.867	0.765	0.101	3.22***	0.298	1.10
American National Election Study (2008)						
United States: certainty of turnout	8.222	7.762	0.460	2.58**	0.139	0.87
United States: turnout	0.766	0.834	0.068	2.62**	0.108	0.53
Canadian Election Study (2008)						
Canada: turnout intention	2.619	2.623	-0.004	-0.11	-0.084	-1.10
Canada: turnout	0.873	0.887	-0.014	-1.00	-0.024	-0.05
International Social Survey Programme (2006)						
Australia	0.980	0.933	0.047	4.08***	1.487	2.66
Canada	0.892	0.836	0.055	1.91*	0.251	0.63
Denmark	0.935	0.936	-0.001	-0.03	-0.325	-1.17
Finland	0.865	0.847	0.018	0.75	-0.250	-0.75
France	0.926	0.883	0.043	2.53**	0.338	0.70
Germany	0.952	0.855	0.097	3.64***	0.843	1.45
Ireland	0.855	0.755	0.100	3.19***	0.181	0.57
Netherlands	0.832	0.800	0.032	0.78	-0.218	-0.68
New Zealand	0.983	0.943	0.040	1.78*	0.491	0.57
Norway	0.927	0.882	0.045	2.47**	0.237	0.76
Sweden	0.860	0.867	-0.007	-0.32	0.020	0.08

Table 7 (continued)

Variable	Means		Difference	T-ratio	Multiple Regression/Logit Results	
	Government Employees	Others			b	t-ratio
International Social Survey Programme (2006)						
(continued)						
Switzerland	0.699	0.574	0.125	3.24***	0.195	0.79
United Kingdom	---	---	---	---	---	---
United States	0.820	0.668	0.152	4.98***	0.245	1.06
All countries	0.896	0.839	0.057	8.73***		
All countries (with fixed effects)			0.053	8.26***		

***prob < 0.001 ** prob < 0.01 * prob < 0.05

Table 8. Binary logit estimates, full model of voter turnout, nine western democracies, 2005 World Values Survey

Variable	Model (1)		Model (2)	
	b	t	b	t
Government employment	0.152	1.74*	0.167	1.56
Union membership	0.210	3.55***	0.219	3.18***
Government employment * union membership	---	---	-0.031	-0.25
Ideological extremism	0.115	3.97***	0.115	3.97***
Importance of politics	0.218	4.34***	0.218	4.34***
Political interest	0.396	8.34***	0.396	8.34***
Life satisfaction	0.066	3.27***	0.066	3.27***
Household financial situation	-0.008	-0.45	-0.008	-0.45
Support for democracy	0.257	5.57***	0.257	5.57***
Age	0.105	8.95***	0.105	8.95
Age ²	-0.0007	-5.94***	-0.0007	-5.94***
Education	0.125	6.52***	0.125	6.53***
Income decile	0.043	2.55**	0.043	2.56**
Upper class	-0.580	-1.75	-0.580	-1.76
Upper middle class	0.051	0.36	0.051	0.36
Lower middle class	-0.029	-0.22	-0.029	-0.23
Working class	-0.239	-1.89*	-0.240	-1.90*
Married	-0.067	-0.57	-0.068	-0.58
Divorced	-0.536	-3.63***	-0.536	-3.63***
Separated	-0.199	-0.91	-0.199	-0.91
Widowed	-0.097	-0.52	-0.097	-0.52
Single	-0.275	-2.32*	-0.276	-2.32**
Church attendance	0.074	3.65***	0.074	3.65***
Religiosity	-0.146	-1.90	-0.146	-1.89
Newspaper news	0.284	3.48***	0.284	3.48
Television news	0.283	1.95*	0.283	1.95*
N	9024		9024	
Pseudo R ²	0.197		0.197	
χ ²	1590.30		1590.36	
Prob (χ ²)	0.000		0.000	

Note: Binary variables representing fixed effects for each country are excluded for the sake of brevity.

***prob < 0.001 ** prob < 0.01 * prob < 0.05

**Table 9. Binary logit estimates for full model of voter turnout, 14 western democracies, 2006
International Social Survey Programme (ISSP) survey**

Variable	b	t
Government employment	0.249	2.74**
Union membership	0.302	3.18***
Ideological extremism	0.808	12.55***
Political interest	0.482	14.94***
Political efficacy	0.115	3.53***
Age	0.089	7.21***
Age ²	-0.001	-4.22***
Education	0.191	6.61***
Married	0.206	2.75**
Church attendance	0.093	5.34***
Employment status	-0.058	-0.65
Decile self-placement	0.078	3.72***
Family income (U.S. dollars)	0.000001	1.23
Australia	2.108	15.12***
Canada	0.963	5.94***
Denmark	---	---
Finland	1.314	7.61***
France	1.290	5.82***
Germany	1.532	10.71***
Ireland	1.021	7.29***
Netherlands	0.243	1.82
New Zealand	2.535	10.44***
Norway	1.321	8.08***
Sweden	1.168	7.46***
Switzerland	-0.140	-1.06
United Kingdom	---	---
N	9413	
Pseudo-R ²	0.238	
χ^2	1890.11	
Prob (χ^2)	0.000	

Table 10. Difference in means for government employees and other respondents on vote choice in the United States (2004, 2008) and Canada (2008), various data sets

Variable	Means		Difference	T-ratio	Multivariate Logit Results	
	Government Employees	Others			b	t-ratio
American National Election Study (2004)						
Republican presidential vote	0.344	0.554	-0.210	-5.05***	-0.248	-0.70
Republican House vote	0.348	0.504	-0.155	-3.48***	0.470	1.34
Republican Senate vote	0.368	0.482	-0.114	-2.10*	0.396	1.02
American National Election Study (2008)						
Republican presidential vote	0.461	0.397	-0.064	-1.83*	0.050	0.18
Republican House vote	0.368	0.484	-0.116	-3.09***	-0.323	-1.20
Republican Senate vote	0.437	0.499	-0.062	-1.23	-0.087	-0.23

***prob < 0.001 ** prob < 0.01 * prob < 0.05

Table 11. Party vote preferences for government employees and other respondents in Canada, Canadian Election Study (2008).

Country / Party	Percentage		Pearson's χ^2	Government Employment Multinomial Logit Coefficients	
	Government Employees	Others		b	t-ratio
Canadian Election Study (2008)					
Liberal Party	31.4%	31.8%	20.08***	-0.248	-0.73
Conservative Party	30.3%	38.9%		---	---
New Democratic Party (NDP)	17.2%	14.2%		-0.767	-1.82
Bloc Quebecois	15.3%	11.3%		-0.039	-0.09
Green Party	5.8%	3.7%		=0.585	-0.98
Total	100%	100%			
Group N	(522)	(1800)			

***prob < 0.001 ** prob < 0.01 * prob < 0.05

Table 12. Party vote intention preferences for government employees and other respondents in various countries, 2005 World Values Survey.

Country / Party	Percentage		χ^2	Government Employment Multinomial Logit Coefficients	
	Government Employees	Others		b	t-ratio
Australia (N = 1330)					
Australian Labour Party	35.7%	29.9%	32.40***	0.645	3.41***
Liberal Party	36.8%	51.6%		---	---
National Party	3.1%	3.1%		0.793	1.74*
Greens	13.0%	6.6%		0.896	3.23***
Australian Democrats	4.3%	3.1%		0.815	2.14*
Independents	0.9%	0.7%		0.259	0.34
One Nation	3.1%	1.5%		1.383	2.66**
Family First	3.1%	3.6%		0.506	1.17
Total	100%	100%			
Group N	(353)	(977)			
Canada (N = 1703)					
Liberal	24.1%	33.7%	19.59***	-0.099	-0.41
Progressive Conservative	33.8%	37.2%		---	---
New Democratic Party (NDP)	24.9%	18.9%		0.035	0.13
Bloc Quebecois	17.1%	10.2%		0.688	2.32**
Total	100%	100%			
Group N	(245)	(1458)			

Table 12 (continued)

Country / Party	Percentage		χ^2	Government Employment Multinomial Logit Coefficients	
	Government Employees	Others		b	t-ratio
Finland (N = 778)					
Social Democratic Party	27.0%	29.8%	10.95***	-0.076	-0.18
Centre Party	25.8%	25.5%		0.254	0.64
National Coalition Party	16.2%	18.8%		---	---
Left Alliance	6.3%	7.4%		0.491	0.81
Swedish Peoples' Part of Finland	0.6%	1.5%		-0.748	-0.63
Green League	17.4%	9.8%		0.395	0.85
True Finns	1.2%	3.3%		-0.240	-0.27
Christian Democrats	5.4%	3.9%		0.868	1.33
Total	100%	100%			
Group N	(167)	(611)			
Germany (N = 1387)					
Christlich-Demokratische Union	35.4%	36.6%	10.24	---	---
Sozial Demokratische Partei	35.4%	31.8%		0.239	1.18
Freie Demokratische Partei	5.4%	6.3%		-0.372	-0.99
Die Gruenen	6.9%	9.7%		-0.254	-0.76
Partei des Democratishen Sozialis	16.3%	12.5%		-0.121	-0.41
Republickaner, NDP	0.7%	3.1%		-0.747	-0.75
Total	100%	100%			
Group N	(277)	(1110)			

Table 12 (continued)

Country / Party	Percentage		χ^2	Government Employment Multinomial Logit Coefficients	
	Government Employees	Others		b	t-ratio
Norway (N = 894)					
Labour Party	38.4%	32.8%	50.74***	0.203	0.71
Progressive Party	14.5%	21.8%		0.137	0.46
Conservative Party	12.5%	21.4%		---	---
Christian Democratic Party	5.4%	2.8%		0.618	1.26
Communist Party	2.3%	0.6%		1.004	1.01
Center Party	7.1%	7.6%		0.106	0.29
Socialist Left Party	16.2%	6.3%		1.142	2.90**
Liberals	3.7%	6.8%		-0.392	-0.92
Total	100%	100%			
Group N	(352)	(542)			
Sweden (N = 766)					
Centerpartiet	5.0%	4.1%	37.03***	0.754	1.74*
Folkpartiet	11.9%	13.8%		0.389	1.28
Kristdemokraterna	4.6%	3.5%		0.571	1.15
Miljopartiet	10.9%	7.5%		0.684	1.65*
Moderata Samlingspartiet	19.9%	36.6%		---	---
Social Demokraterna	37.4%	31.0%		0.468	1.37
Vansterpartiet	10.3%	3.5%		1.390	2.73**
Total	100%	100%			
Group N	(302)	(464)			

Table 12 (continued)

Country / Party	Percentage		χ^2	Government Employment Multinomial Logit Coefficients	
	Government Employees	Others		b	t-ratio
Switzerland (N = 818)					
Freisinning-Demokratische Partei	17.7%	22.1%	27.58***	0.344	1.00
Sozial Demokratische Partei	27.2%	23.0%		0.320	0.82
Christlich-Democratische Volkspartei	12.7%	13.6%		0.349	0.91
Schwizerische Volkspartei	9.5%	19.9%		---	---
Grune Partei	22.2%	12.7%		0.679	1.74*
Libérale Partei	2.3%	2.4%		0.595	0.94
Evangelische Volkspartei	3.2%	1.8%		1.375	2.03*
Partei der Arbeit	2.7%	1.2%		0.266	0.30
Christlichsoziale Partei	1.8%	1.3%		0.909	1.21
Lega Dei Ticinesi	0.9%	2.0%		-0.517	-0.47
Total	100%	100%			
Group N	(221)	(597)			
United States (N = 1100)					
Republican Party	36.4%	35.3%	0.123	---	---
Democratic Party	45.8%	45.6%		-0.053	-0.19
Independent	17.8%	19.0%		0.026	0.08
Total	100%	100%			
Group N	(118)	(982)			

Note: For the multinomial logit results, the omitted (comparison) group is the most conservative of the major political parties in each given political system.

***prob < 0.001 ** prob < 0.01 * prob < 0.05

Appendix 1. Description of variables used in 2004 and 2008 American National Election Studies

Variable	Description
ANES 2004 and ANES 2008	
Government employment	1 = government employee; 0 = otherwise
Partisan identification	7-point partisan identification scale (6 = strong Republican)
Presidential approval (general)	Presidential approval (3 = strongly approve; . . . ; 0 = strongly disapprove)
Presidential approval (economy)	Presidential economic approval (3 = strongly approve; . . . ; 0 = strongly disapprove)
Presidential approval (foreign)	Presidential foreign policy approval (3 =strongly approve; . . . ; 0 = strongly disapprove)
Congressional approval	Congressional approval (3 = approve strongly; 0 = disapprove strongly)
Feeling thermometer: George W. Bush	0-100 scale feeling thermometer in George W. Bush
Feeling thermometer: Democratic Party	0-100 scale feeling thermometer in Democratic Party
Feeling thermometer: Republican party	0-100 scale feeling thermometer in Republican Party
Spending on highways	Support for spending on highways (6 = increased a great deal)
Spending on social security	Support for spending on social security (6 = increase a great deal)
Spending on public schools	Support for spending on public schools (6 = increase a great deal)
Spending on science and technology	Support for spending on science and technology (6 = increase a great deal)
Spending on crime	Support for spending on crime (6 = increase a great deal)
Spending on welfare	Support for spending on welfare (6 = increase a great deal)
Spending on child care	Support for spending on child care (6 = increase a great deal)
Spending on foreign aid	Support for spending on foreign aid (6 = increase a great deal)
Spending on aid to the poor	Support for spending on aid to the poor (6 = increase a great deal)

Appendix 1 (continued)

Variable	Description
ANES 2004 and ANES 2008	
Spending on border security	Support for spending on border security (6 = increase a great deal)
Spending on terrorism prevention	Support for spending on war on terrorism (6 = increase a great deal)
Republican presidential vote	1 = R voted for Republican Presidential candidate; 0 = R voted for Democratic Presidential candidate
Republican House vote	1 = R voted for Republican House candidate; 0 = R voted for Democratic House candidate
Republican Senate vote	1 = R voted for Republican Senate candidate; 0 = R voted for Democratic Senate candidate
ANES 2004 only	
Presidential approval (deficit)	Presidential approval on the budget deficit
Presidential approval (terror)	Presidential approval on the war of terror
Country on right track	1=country on right track; 0=country on wrong track
Feeling thermometer: John Kerry	0-100 scale feeling thermometer in John Kerry
Feeling thermometer: Ralph Nader	0-100 scale feeling thermometer in Ralph Nader
Feeling thermometer: Dick Cheney	0-100 scale feeling thermometer in Dick Cheney
Feeling thermometer: John Edwards	0-100 scale feeling thermometer in John Edwards
Left-right scale	0-10 left right scale (10 = strong right; . . . ; 0 = strong left)
Government spending scale	Government spending and service scale (6 = high)
Defense spending scale	Defense spending scale (6 = high)
Support for Bush tax cuts	Scale of support for Bush tax cuts
Tax burden: Personal	1 = R pays too much; 0 = just right; -1 = R pays too little
Tax burden: the poor	1 = poor pay too much; 0 = just right; -1 = poor pay too little

Appendix 1 (continued)

Variable	Description
ANES 2004 only (continued)	
Tax burden: the rich	1 = rich pay too much; 0 = just right; -1 = poor pay too little
Turnout	Did R vote in 2004 Presidential election? (0=no; 1=yes)
ANES 2008 only	
Feeling thermometer: Barack Obama	0-100 scale feeling thermometer in Barack Obama
Feeling thermometer: John McCain	0-100 scale feeling thermometer in John McCain
Feeling thermometer: Joe Biden	0-100 scale feeling thermometer in Joe Biden
Feeling thermometer: Sarah Palin	0-100 scale feeling thermometer in Sarah Palin
Liberal-conservative ideology	Liberal-conservative scale (6 = extremely conservative)
Government spending scale (1)	Government services scale (6 = many more services)
Government spending scale (2)	Government services scale (6 = a lot more services)
Defense spending scale (1)	Government defense spending scale (6 = government should increase)
Defense spending scale (2)	Government defense spending scale (6 = a lot more)
Spending on the environment	Support for spending on the environment (6 = increase a great deal)
Overall spending scale	Sum of all spending scales
Domestic spending scale	Sum of all domestic spending scales
Progressive taxes	1 = rich should pay higher tax rate; 0 = flat rate; -1 = lower rate
Presidential approval (environment)	Presidential environmental approval (3 = strongly approve; . . . ; 0 = strongly disapprove)

Appendix 1 (continued)

Variable	Description
ANES 2008 only (continued)	
Presidential approval (health)	Presidential health approval (3 = strongly approve; . . . ; 0 = strongly disapprove)
Presidential approval (Iraq)	Presidential Iraq War approval (3 =strongly approve; . . . ; 0 = strongly disapprove)
Certainty of turnout	Level of certainty that R will vote (10 = definitely will vote)
Turnout	1 = R voted in 2008 presidential election; 0 = otherwise

Appendix 2. Description of variables used in 2005 World Values Survey.

Variable	Description
Liberal-Conservative ideology	10-point ideology scale (10 = strong conservative; . . . ; 0 = strong liberal)
Government employment	1 = government employee; 0 = otherwise
Union membership	1 = union member; 0 = otherwise
Age	Respondent's age
Age ²	Respondent's age squared
Education	Education level in 9 categories
Religiosity	1 = R is religious; 0 = R is not a religious person or is an atheist
Church attendance	Church attendance (0-6 scale): 6 = more than once a week; . . . ; 0 = never)
Upper class	1 = upper class; 0 = otherwise
Upper middle class	1 = upper middle class; 0 = otherwise
Lower middle class	1 = lower middle class; 0 = otherwise
Working class	1 = working class; 0 = otherwise
Ideological extremism	Folded ideological scale: 0.5 (moderate) to 4.5 (ideologically extreme)
Importance of politics	3 = politics is very important; . . . ; 0 = politics is not important at all)
Political interest	3 = R very interested in politics; . . . ; 0 = R not at all interested
Life satisfaction	R's satisfaction with life (10 = satisfied)
Household financial situation	R self-reported income decile
Support for democracy	3 = having a democratic political system is very good; . . . ; 0 = very bad
Married	1 = R is married; 0 = otherwise
Divorced	1 = R is divorced; 0 = otherwise

Appendix 2 (continued)

Variable	Description
Separated	1 = R is separated; 0 = otherwise
Widowed	1 = R is widowed; 0 = otherwise
Single	1 = R is single; 0 = otherwise
Newspaper news	1 = R used daily newspaper in last week; 0 = otherwise
Television news	1 = R used news broadcasts in last week; 0 = otherwise
Turnout	1 = R turned out to vote in country's most recent election; 0 = otherwise)
Party preference: USA	1 = Republican; 2 = Democrat; 3 = Independent
Party preference: Australia	1 = Australian Labor Party; 2 = Liberal Party; 3 = National Party; 4 = Greens; 5 = Australian Democrats; 6 = Independent; 7 = One Nation; 8 = Family First;
Party preference-Canada	1 = Liberal Party; 2 = Progressive Conservative Party; 3 = New Democratic Party; 4 = Bloc Quebecois
Party preference: Finland	1 = Social Democratic Party; 2 = Centre Party; 3 = National Coalition Party; 4 = Left Alliance; 5 = Swedish People's Party of Finland; 6 = Green League; 7 = True Finns; 8 = Christian Democrats
Party preference: Germany	1 = Christlich-Demokratische Union; 2 = Sozial Demokratische Partei; 3 = Freie Demokratische Partei; 4 = Die Gruenen; 5 = Partei des Demokratishen Sozialis; 6 = Republickaner, NDP
Party preference: Norway	1 = Labour Party; 2 = Progressive Party; 3 = Conservative Party; 4 = Christian Democratic Party; 5 = Communist Party; 6 = Center Party; 7 = Socialist Left Party; 8 = Liberals
Party preference: Sweden	1 = Centerpartiet; 2 = Folkpartiet; 3 = Kristdemokraterna; 4 = Miljopartiet; 5 = Moderata Samlinspartiet; 6 = Social Demokraterna; 7 = Vansterpartiet
Party preference: Switzerland	1 = Freisinning-Demokratische Partei; 2 = Sozial Demokratische Partei; 3 = Christlich-Democratische Volkspartei; 4 = Schweizerische Volkspartei ; 5 = Grune Partei Liberale Partei; 6 = Evangelische Volkspartei; 7 = Partei der Arbeit ; 8 = Christlichsoziale Partei ; 9 = Lega Dei Ticinesi

Appendix 2 (continued)

Variable	Description
Italy	1 = Italy; 0 = otherwise
Canada	1 = Canada; 0 = otherwise
Australia	1 = Australia; 0 = otherwise
Norway	1 = Norway; 0 = otherwise
Sweden	1 = Sweden; 0 = otherwise
Finland	1 = Finland; 0 = otherwise
Switzerland	1 = Switzerland; 0 = otherwise
Germany	1 = Germany; 0 = otherwise

Appendix 3. Description of variables used in the 2008 Canadian Election Study.

Variable	Description
Government employment	1 = government employee; 0 = otherwise
Liberal-conservative ideology	Ideological self-identification (0 = extreme left; . . . ;10 = extreme right)
Spending on defense	Should the federal government spend more or less on defense? (-1 = spend less; 0 = the same; 1 = spend more)
Spending on welfare	Should the federal government spend more or less on welfare? (-1 = spend less; 0 = the same; 1 = spend more)
Spending on health care	Should the federal government spend more or less on health care? (-1 = spend less; 0 = the same; 1 = spend more)
Spending on education	Should the federal government spend more or less on education? (-1 = spend less; 0 = the same; 1 = spend more)
Spending on the environment	Should the federal government spend more or less on environment? (-1 = spend less; 0 = the same; 1 = spend more)
Personal income taxes	Should personal income taxes be increased? (-1 = tax less; 0 = the same; 1 = tax more)
Corporate income taxes	Should corporate income taxes be increased? (-1 = tax less; 0 = the same; 1 = tax more)
Turnout intention	Are you certain to vote on the election day? (0-3 scale. 0 = certainly not; . . . ; 3 = certain to vote)
Turnout	1 = voted in the 2008 federal election; 0 = otherwise
Vote choice	For which party did you vote in the 2008 federal election? (0 = Other parties-base category; 1 = Liberal Party; 2 = Progressive Conservative; 3 = New Democratic Party; 4 = Bloc Quebecois; 5 = Green Party)
Gender	Gender of respondent (0 = female; 1 = male)
Age	Age of respondent
Age2	Age squared

Appendix 3 (continued)

Variable	Description
Satisfaction with democracy	Satisfaction with the way democracy works in Canada (0 = not at all; . . . ; 3 = very satisfied)
Interest in federal elections	How interested are you in the federal election? (0 = not at all; . . . ; 10 = a great deal)
Interest in politics	How interested are you in politics in general? (0 = not at all; . . . ; 10 = a great deal)
Sociotropic economic evaluations	Has the economy got better last year? (-1 = worse; 0 = the same; 1 = better)
Pocketbook economic evaluations	Are you better off financially than a year ago? (-1 = worse; 0 = the same; 1 = better)
Union membership	Do you belong to the union? (0 = no; 1 = yes)
Married	Marital status (1 = married or partnered; 0=single, separated, divorced, or widowed)
Employment status	1 = work with pay, i.e. full time or part-time; 0 = without pay, i.e. retired, students, unemployed, etc.)
Ideology extremism	0-5 scale: 0 = neutral or moderate; . . . ; 5 = extreme left or right.
Education	Years of education
Family income	Family income (in thousands)

Appendix 4. Description of variables used in 2006 International Social Survey Programme.

Variable	Description
Government employment	1= government employee; 0=otherwise
Union membership	1 = union member; 0 = otherwise
Age	Age
Age ²	Age square
Education	Highest degree ever obtained (0-5 scale)
Married	1 = married or partnered; 0 = single, widow, or divorced
Church attendance	Frequency of attendance at religious services (0-7 scale)
Employment status	1 = full-time; 0.5 = part-time; 0 = currently not employed
Family income	Family income (converted to US dollars)
Ideology	Left-right party affiliation (-2=extreme left; 2=extreme right)
Decile self-placement	Top bottom self-identified social status (0-10 scale)
Ideological extremism	Folded ideology (0-2 scale)
Political interest	Interest in politics (0-5 scale)
Political efficacy	Average citizens have influence in polities (-2 = strongly disagree; 2 = strongly agree)
Turnout	1 = respondent voted in last election; 0 = otherwise
Australia	Dummy variable (1 = Australia; 0 = otherwise)
Canada	Dummy variable (1 = Canada; 0 = otherwise)
Denmark	Dummy variable (1 = Denmark; 0 = otherwise)
Finland	Dummy variable (1 = Finland; 0 = otherwise)
France	Dummy variable (1 = France; 0 = otherwise)
Germany	Dummy variable (1 = Germany; 0 = otherwise)

Appendix 4 (continued)

Variable	Description
Ireland	Dummy variable (1 = Ireland; 0 = otherwise)
Netherlands	Dummy variable (1 = Netherlands; 0 = otherwise)
New Zealand	Dummy variable (1 = New Zealand; 0 = otherwise)
Norway	Dummy variable (1 = Norway; 0 = otherwise)
Sweden	Dummy variable (1 = Sweden; 0 = otherwise)
Switzerland	Dummy variable (1 = Switzerland; 0 = otherwise)
United Kingdom	Dummy variable (1 = United Kingdom; 0 = otherwise)

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