



NORTH-HOLLAND

---

---

The Journal of  
Socio-  
Economics

---

---

Journal of Socio-Economics 29 (2000) 349–360

## Constituent diversity and congress: the case of NAFTA

Christopher Dennis<sup>a,\*</sup>, Benjamin Bishin<sup>b</sup>, Politimy Nicolaou<sup>a</sup>

<sup>a</sup>*California State University at Long Beach, Long Beach, CA 90840, USA*

<sup>b</sup>*University of California at Los Angeles, CA, USA*

---

### Abstract

An important finding of legislative research is that constituency variables are more important predictors of a legislator's vote when constituent preferences are homogeneous, as opposed to when the various elements of the legislator's constituency are pulling the legislator in opposing directions (Goff & Grier, *Public Choice*, 76, 5–20; Bailey & Brady, *American Journal of Political Science*, 42, 524–544). We examine these expectations on a highly salient vote, the 1993 senate vote on the North American Free Trade Agreement. While we find support for the view that constituency variables are more important in homogeneous than heterogeneous constituencies, we also find that by confining constituency variables to economic factors scholars overlook the importance of constituent ideology on legislator behavior in homogeneous constituencies. © 2000 Elsevier Science Inc. All rights reserved.

---

### 1. Does constituent diversity matter?

One of the most researched topics in recent years is Congressional roll call voting (see Krehbiel, 1993; Poole & Rosenthal, 1997, for a review of the literature). Generally, this work focuses on identifying the various factors *ex post* that influence roll call votes. The results of this vast literature may best be described as contradictory. Some of the literature finds that, on at least some types of issues, constituents are stentorian in their ability to influence legislators (e.g., Miller & Stokes, 1963, Cnudde & McCrone, 1966; Kingdon, 1973; Fenno, 1978; Erikson, 1978; Markus, 1974; Page et al., 1984; Jackson & King, 1989; Wright, 1989; Arnold, 1990; Bartels, 1991). However, an only slightly less voluminous literature finds that

---

\* Corresponding author. Tel.: +1-562-985-4711/4704; fax: +1-562-985-4979.

*E-mail address:* edennis@csulb.edu (C. Dennis).

legislators' personal preferences as reflected through their ideology are the most important influence on roll call decisions (e.g., Achen, 1978; Bernstein, 1989; Kau & Rubin, 1979, 1993; Poole & Rosenthal, 1997; Peltzman, 1984, 1985; but for a different view of ideology see Richardson & Munger, 1990; Dougan & Munger, 1989). Indeed these results lead Arnold (1990) to hold that "Unfortunately, the effects of these electoral calculations will never show up in a study of representation that searches for correlations between measures of constituency opinion and legislators' actual decisions."

We believe that these contradictory results stem from the fact that researchers have not fully examined the various ways in which legislators interpret the views of their constituents (for a similar view see Achen, 1978). Due to difficulty obtaining data, most studies use whatever proxy for constituency effect is available. However, since legislators may use different constituency cues for different constituencies on various issues, studies using measures based only on the best available data may understate the effect of constituency.

In order to more fully explore the impact of constituency preferences on legislator behavior, we need a vote that has attained sufficient salience so that constituency opinion is reasonably well-formed and for which there are good measures of the various nonconstituency opinion factors that previous research suggests may also influence the legislator (e.g., the economic self-interest of the constituency). One recent senate vote that meets these criteria is the vote on the North American Free Trade Agreement (NAFTA).

## **2. Previous research**

Research shows that legislators are most likely to be constrained by public opinion on highly salient issues (Miller & Stokes, 1963; Key, 1961; Kingdon, 1973; Erikson, 1978; Kuklinski, 1978; Page et al., 1984; Arnold, 1990; Bartels, 1991). For example, Miller & Stokes, (1963) find that on highly visible civil rights issues, legislators use the opinion of their constituents as a guide to roll call voting (however, see Achen, 1978). Similarly, Kingdon (1973) finds that legislators are concerned with the opinion of constituents on highly visible issues about which constituents express intense preferences. Bartels (1991) finds that constituent opinion not only influences legislators votes but effects the distribution of policy benefits stemming from the legislation. Thus it seems likely that constituent preferences influence legislator behavior on highly salient issues.<sup>1</sup>

Research asserting a strong constituency role frequently relies on constituent opinion as the measure of preference and examines salient issues.<sup>2</sup> However, this research does not fully examine the different methods by which constituents influence their legislators. For example, while legislators could respond to constituent opinion, they could also respond to either the ideology (especially if constituent opinion is either not well-formulated or communicated) or the economic self-interest of the constituency.

In addition to constituent opinion, studies suggest that legislators use two other mechanisms to interpret constituent preference. The 'ideology hypothesis' suggests that legislators' actions reflect the general ideological preferences of their constituents (Wright, 1989; Medoff et al., 1995).<sup>3</sup> Conceptually, ideology is the general philosophical belief system voters have about politics. Research suggests that "a congressman develops a certain 'feel'

for what he believes his constituents want” (Froman, 1963, p. 9). Arnold (1993, p. 407) notes that “detailed policy preferences are not necessary for effective control so long as the controllers have clear outcome preferences.” The ideology hypothesis holds that legislators use constituent ideology as a decisional shortcut for position-taking. Legislators use ideology because it is relatively less costly to gauge than are other types of constituent preference.

Finally, the ‘interest hypothesis’ asserts that legislators vote the preferences of constituents according to their economic interest (Kalt & Zupan, 1984; Peltzman, 1984, 1985; Bernstein, 1989; Jackson & King, 1989).

The differences between these cues can be important. Legislators that rely on constituent ideology or economic interest do so at great potential cost. Such measures may not provide consistently accurate cues. While ideology provides a general decisional guide, on any given issue it may be inconsistent with constituent beliefs, particularly if they lack constraint (Converse, 1964). Similarly, economic interest may provide incorrect cues as some voters behave sociotropically (Kinder & Kiewiet, 1979). Given the potential problems with using ideological and economic proxies for constituent preferences, we might expect legislators to rely exclusively on constituent opinion. Unfortunately, constituent opinion is often expensive to gather and even then may not be well formed on any given issue, thus reducing its usefulness.

Constituent diversity complicates examination of legislator’s decisions about what type of cue to use. Recent work by Bailey and Brady (1998) finds that legislators represent homogenous constituencies differently than heterogeneous ones. Thus, the cues used to infer the preference of constituents may also vary depending on the heterogeneity of constituents as well as the availability and cost of information discussed above.

The final hypotheses concern characteristics of the senator: ideology and party affiliation. A large amount of congressional research finds legislator ideology to be an important predictor of a legislators’ votes (see Poole and Rosenthal, 1997 for a review of the literature). The debate about NAFTA did touch on philosophical issues. The principal arguments against NAFTA were that free trade, especially with Mexico, would result in a net loss of jobs in the United States and would cause downward pressure on wages for American workers. Additionally, critics of NAFTA argued that free trade with nations that had weaker environment standards than the United States would result in a weakening of environmental standards and more pollution. Since both concerns about economic inequality and environment standards are typically “liberal” causes, our expectation is that the more liberal the senator, the less supportive of NAFTA they will be. Additionally, since Democratic senators are disproportionately supported by both downscale economic groups and environmentalists, we hypothesize that Democratic senators will be less likely to support NAFTA than Republican senators.

Previous research on NAFTA by Bailey and Brady (1998) shows that constituency variables have a greater impact in homogeneous states whereas senator characteristics (e.g., senator ideology and party affiliation) are more important in heterogeneous states. This likely occurs because in more homogeneous states the constituency is less diversified and hence the senator receives a similar message from the various elements of their constituency. In more heterogeneous states a senator’s constituency is more likely to be conflicted, hence sending the senator a more contradictory message (Bailey and Brady, 1998). Accordingly, after

presenting an analysis for the full senate, we will present separate analyses for more homogeneous and more heterogeneous states.

### 3. Data and methods

#### 3.1. *Dependent variable*

In order to test the above hypotheses, it is necessary to find a vote that meets the following criteria: (1) it can be matched with specific public opinion and ideology questions for a legislator's constituency; (2) it can be categorized as being of high salience (a sufficient percentage of constituents are likely to have an opinion on the issue); (3) it is conflictual (defined by having at least 20% of votes supporting the losing position - on the need for "conflictuality" see Kau and Rubin, 1993, p. 157).

The Senate roll call vote on The North American Free Trade Agreement (NAFTA) meets all three of the above criteria. Media reporting on NAFTA was extensive. Part of this extensive reporting concerned a debate between Vice-President Gore and former independent presidential candidate H. Ross Perot on NAFTA in front of a national television audience on November 9, 1993. In addition, a count by the authors of major metropolitan newspaper articles in the six months preceding the senate vote on NAFTA shows that NAFTA had much greater coverage than other contemporary issues.<sup>4</sup> Additionally, as will be discussed ahead, opinion polling and economic self-interest measures are readily available on NAFTA. Consequently, NAFTA is an appropriate vote for examining the role of constituency factors on a highly salient vote.

NAFTA lowered a series of tariffs on trade between the United States, Canada and Mexico. The vote occurred on November 20, 1993, and passed 61–38 (CQ Weekly Reports, November 27, 1993, p. 3294). Votes or announcements in favor of the NAFTA are scored "1" while opposition is scored "0".<sup>5</sup>

#### 3.2. *Independent variables*

In order to find measures of constituent ideology and opinion we turn to the NES Pooled Senate Study 1988, 1990, 1992. This is the only study that asks extensive public opinion questions that can be disaggregated by state. To measure constituent opinion on NAFTA, we use an NES question measuring opinion on import restrictions. Specifically, respondents answered the following question:

Some people have suggested placing new limits on foreign imports in order to protect American jobs. Others say that such limits would raise consumer prices and hurt American exports. Do you favor or oppose placing new limits on imports - or haven't you thought much about this?

Higher scores indicate increased support for import restrictions. Although the above question does not mention NAFTA by name, it taps the question of limiting imports to

protect jobs. This was the central concern of NAFTA opponents. More direct statewide public opinion polls about NAFTA are unavailable.

Mean state ideology is used to test the ideology hypothesis. Specifically, constituents self-placement scores on the NES seven point ideology scale are averaged for each state. This scale ranges from 1 (very liberal) to 7 (very conservative).

We use five different measures of constituent economic interest. Since exporters stood to gain from NAFTA we use the export share of production (defined as agriculture, mining and manufacturing) for each state based on averaging scores for 1993 and 1994 (see Bailey and Brady, 1998, p. 530). As firms and workers involved in industries vulnerable to import competition stood to lose under NAFTA, we use a measure of state imports which is similar to the exports variable (see Bailey and Brady, 1998, p. 531). Since politicians may respond to voters who are economically impacted as opposed to a total monetary impact, we use an estimate of the percentage of state jobs vulnerable to loss through NAFTA.<sup>6</sup>

Labor unions were strongly opposed to NAFTA. The percentage of manufacturing produced by union labor divided by total labor is used as a measure of labor strength.<sup>7</sup>

Our final measure of economic interests concern consumers. As Bailey and Brady (1998, p. 531) note,

Even though voters who relate to trade primarily as consumers are generally not active on trade matters, they are very numerous in many states and the threat of an opponent mobilizing even a small portion of them against protectionist policy stances can push legislators to respond to these latent preferences.

Since workers in nontradable industries are likely to relate to trade issues as consumers, we use the proportion of workers in nontradable industries as our measure of consumer interests on NAFTA.

Our next independent variable is the senator's ideology. To measure senator ideology we use the ratings of the Chamber of Commerce for 1993. These scores more directly measure senator's economic ideology than do more general measures (e.g., Poole and Rosenthal's D-NOMINATE measure).<sup>8</sup>

Our final independent variable is the senator's political party affiliation. Many studies find that a legislator's party affiliation is an important predictor of their voting behavior (Clausen, 1973; on NAFTA specifically see Holian, et al., 1997 and Bailey and Brady, 1998). Since members of labor unions disproportionately support Democratic candidates, it makes sense that the impact of union strength would interact with political party affiliation (Bailey and Brady, 1998). Therefore, political party affiliation is modeled both additively and interactively with union strength. Democratic senators are coded "1" while Republican senators are coded "0."

#### 4. Findings

The results in Table 1 suggest that senator characteristics (ideology and party affiliation), not constituent characteristics drive voting on NAFTA.<sup>9</sup> The only constituency variable that is statistically significant is the change in exports.<sup>10</sup>

Table 1  
Logistic regression of NAFTA on constituency influences

Constant	–28.863*
	(12.443)
Constituent opinion	.077
	(2.141)
Constituent ideology	8.588
	(7.959)
State exports	178.220*
	(91.061)
Change in imports	–140.600
	(318.480)
Employment in non-tradeables	20.440
	(13.551)
Jobloss	–.071
	(.179)
Percent union	12.144
	(21.123)
Party	4.793**
	(1.748)
Party* union	–33.744
	(24.713)
Chamber of Commerce rating	.073**
	(.023)
Likelihood ratio index	.25
Percent of cases correctly predicted	73.4
Chi-square	33.331

Estimated standard errors in parentheses.

\*  $p < .05$  level; \*\*  $p < .01$  level; \*\*\*  $p < .001$  level.

As mentioned previously, there is good reason to re-estimate the equation in Table 1 separately for both heterogeneous and homogeneous states. Theoretically, political conflict springs from differences in interests or political philosophy. The more heterogeneous the constituency, the more likely people are to differ in their interests and/or political opinions/philosophy. Therefore, the more heterogeneous the constituency, the more conflicting cues the legislator is likely to receive. The more constituency cues conflict, the more likely the legislator is to use their own ideology as the basis for decision. Thus, if there is little to be gained politically by voting in a particular direction, the legislator is more likely to vote according to their own personal ideological view of what is “good.” Conversely, the more homogeneous the constituency, the more unidirectional the constituency cue is likely to be. Therefore, we should expect that in more heterogeneous states legislator characteristics (e.g., ideology) should be more important determinants of the vote whereas in more homogeneous states constituency variables should be more important. Empirically, Bailey and Brady (1998), in a study of senate voting on NAFTA, have found much support for the previously mentioned expectations. Accordingly, it seems logical to re-estimate the model in Table 1 for both heterogeneous and homogeneous states. Following Bailey and Brady (1998) we divide states between heterogeneous and homogeneous based upon whether the state is above, or below, the median position on a re-estimation of Sullivan’s state diversity index.<sup>11</sup>

Table 2

Logistic regression of NAFTA on constituency influences heterogeneous versus homogeneous states

	Heterogeneous states	Homogeneous states
Constant	25.383 (30.701)	-260.890* (112.280)
Constituent opinion	-.741 (6.063)	-7.727 (6.627)
Constituent ideology	-32.117 (22.944)	107.260* (54.780)
State exports	-247.460 (288.910)	1319.100* (553.200)
Change in imports	1379.300 (1279.400)	-2343.200 (1232.000)
Employment in non-tradeables	-24.772 (28.860)	258.110* (114.250)
Jobloss	.009 (.372)	.586 (.572)
Percent union	-78.407* (39.249)	163.240 (109.800)
Party	4.696 (3.350)	15.101* (7.260)
Party* union	13.077 (43.430)	-175.820 (111.220)
Chamber of Commerce rating	.130* (.054)	.066 (.046)
Likelihood ratio index	.52	.59
Percent of cases correctly predicted	89.7	87.7
Chi-square	34.898	37.027

Estimated standard errors in parentheses.

\*  $p < .05$  level; \*\*  $p < .01$  level; \*\*\*  $p < .001$  level.

The results of Table 2 reveal important findings concerning how constituencies influence legislators. The results for the heterogeneous states are much more similar to the results for the full senate, as shown in Table 1, than are the results for the homogeneous states. In the heterogeneous states, with the exception of unionization, none of the constituent economic or opinion variables is statistically significant.<sup>12</sup> However, as with the full senate, senator ideology is statistically significant. In the homogeneous states, like Bailey and Brady (1998), we find that various constituency economic variables are statistically significant. However, since Bailey and Brady (1998) did not include measures of either constituent opinion on exports or constituent ideology, they were unable to examine whether either constituent opinion and/or ideology, in addition to constituent economic interests, influenced senators in homogeneous states.<sup>13</sup> As the results in Table 2 indicate, while constituent opinion does not have a statistically significant impact on senatorial voting on NAFTA in homogeneous states, constituent ideology does have a significant impact. Furthermore, this finding is robust against alternative measures.<sup>14</sup>

## 5. Discussion

The results show that while there is merit in distinguishing between heterogeneous and homogenous constituencies, it is also important, at least on highly salient votes, to incorporate measures of constituency. As Goff and Grier (1993) and Bailey and Brady (1998) suggest, constituency has a greater impact when the constituency sends a relatively unified message, as in homogeneous states. However, on a highly salient vote with obvious economic implications, it is also important to incorporate the ideology of the constituency. While economic factors are important, constituency views also matter.

While our findings indicate that in homogeneous states constituency ideology has a significant effect on the probability a senator will support NAFTA, constituency opinion is not significant. One reason constituency opinion may have been insignificant on NAFTA is that public opinion was late to form. At the time of the Perot versus Gore debate, just 10 days before the senate vote, only 34% of the public supported NAFTA (Duncan, 1993). After the debate, 57% supported NAFTA (Duncan, 1993). Given the lateness of formation, it is probable that opinions on NAFTA were not strongly held by the electorate. Therefore, since public opinion on NAFTA was either not well formed, or not strongly held, senators from more homogeneous states turned to the ideological orientation of their constituency, as one of several factors in deciding how to vote on NAFTA.

Regardless of whether public opinion is either sufficiently well formed or communicated to legislators, our results should serve as an important reminder that when constituency is sufficiently homogeneous to make constituency variables important, scholars should be sure to include constituency ideology in their models. Strictly economic or demographic models of constituency do not fully capture the means by which constituents influence their representatives.

This research shows that the notion of one monolithic constituency is incorrect. These results find distinctions in the cues used by legislators depending on the type of constituency they represent, either heterogeneous or homogenous. However, this work also highlights the nature of decisional cues within heterogeneous constituencies as well. While our supposition is that such constituencies are less likely to agree on policy than are homogenous constituencies, behavior within these groups is context dependent. The preference agreement of citizens within heterogeneous constituencies doubtlessly varies according to the issue in question.

Consequently, future research should address this complexity by accounting for the subgroups (sub constituencies) to whom legislators appeal on various issues. Legislators are likely to rely on the preferences of the subgroup of constituents that feel most strongly on the issue in question (Arnold, 1990). Thus, future studies should account for the intensity of such sub constituents when examining influences on legislator's behavior.

## Notes

1. At the very least. Indeed, perhaps the most powerful finding of the contemporary literature on Congress is that legislators are primarily driven by what constituents want (Froman, 1963; Kingdon, 1973; Mayhew, 1974; Fenno, 1978; Arnold, 1990).
2. Indeed, a great debate exists concerning the existence of a link between constituency



preferences and legislator voting (Erikson, 1978, but for a contrary view see Bernstein, 1989).

3. Since researchers do not recognize the various types of constituency cues, they do not explicitly recognize use of the hypotheses advanced *infra* in their work. Thus, the work cited *infra* are examples that implicitly reflect the constituency measures we describe.
4. Data on the number of articles per state can be obtained from the authors.
5. In modeling senate voting on NAFTA, Bailey and Brady (1998) use a three point scale measuring support for NAFTA, which includes the vote on labor and environmental “side agreements” to NAFTA as well as the vote on NAFTA itself (0 = voted no on both NAFTA and the side agreements; 1 = voted yes on either NAFTA or the side agreements but not both; 2 = voted yes on both NAFTA and the side agreements). We think that scaling the votes on NAFTA is undesirable for two reasons. First, the middle position (i.e., “1”) says that supporting NAFTA and supporting the side agreements are equivalent positions. It is unclear, at least to us, why supporting NAFTA but opposing the side agreements is the same as supporting the side agreements but opposing NAFTA itself. Secondly, it is not clear that this scale is monotonic. Specifically, assuming that the scale measures support for free trade, it is unclear why supporting both NAFTA and the side agreements (a score of “2”) is more supportive of free trade than supporting NAFTA and opposing the side agreements (a score of “1”). A good case can be made that since the side agreements represent restrictions on the conditions under which trade can occur, the most “pro” free trade combination would be to support NAFTA and oppose the side agreements. Finally, since our interest is in examining the various methods, including constituent opinion, by which constituencies can influence legislators and most all the public attention was on the final vote on NAFTA, we examine only the final vote on NAFTA.
6. This estimate was supplied by the AFL-CIO.
7. The data are taken from the *1991 State and Metropolitan Area Data Book*. We use data on union membership instead of campaign contributions from unions as our measure of union strength for two reasons. First, since we are trying to assess constituency effects on senators we need measures which show how strong a particular group is numerically in the senator’s constituency. Second, as Langbein (1993) argues, while it is possible that a group could “buy” a legislator’s vote, it is more likely that money is given to those legislator’s who are predisposed to support the group’s position.
8. The Chamber of Commerce rating correlates highly with alternative measures of senator ideology. For example, The Chamber of Commerce rating correlates with Poole and Rosenthal’s D-NOMINATE measure at 0.89.
9. To examine the robustness of the results in Table 1, we re-estimated the equation substituting the statewide percentage of the 1992 president vote for H. Ross Perot in place of the exports question. Since Perot made opposition to NAFTA one of his major themes in the 1992 presidential campaign, the Perot vote could be interpreted, in part, as opposition to NAFTA. Additionally, the Perot measure was found to be significant in a study of the NAFTA vote in the House of Representatives (Holian et

- al., 1997). The Perot vote was not close to being statistically significant. Additionally, we re-estimated the equation using Erikson et al., (1993) measure of mean state ideology in place of our measure of constituent ideology. Like the Perot measure, the Erikson, et al measure was not close to being statistically significant.
10. Multicollinearity is certainly a concern. Over 70% of the variation of each of the economic variables, as well as the interaction term between union and party affiliation, is explained by all the remaining independent variables. However, deleting one independent variable at a time has very little effect on the results. Furthermore, as will be shown ahead, a number of the independent variables that are statistically insignificant in Table 1 become statistically significant when we estimate the same equation as in Table 1 separately for both heterogeneous and homogeneous states. In these later equations, the degree of multicollinearity is very similar to that in Table 1. Finally, the independent variable that has the most variation (92%) explained by the other independent variables, average change in imports, is statistically significant in Table 1.
  11. The heterogeneous states are: NY, NJ, MA, CA, CT, HI, RI, IL, LA, FL, NM, PA, WI, NH, TX, VT, ND, AZ, MD, MI, MN, DE, NV, OH and CO (Bailey and Brady 1998, 536).
  12. As previously (see note #9), we re-estimated the results substituting both the Perot and Erikson et al. measures for our measures of constituent opinion on exports and constituent ideology. Again, neither the Perot nor the Erikson, et al measures was statistically significant.
  13. Calculating the probabilities of senator's supporting NAFTA under various conditions in homogeneous states is not feasible. For example, setting one independent variable one standard deviation above its mean and all other independent variables at their means produced probabilities of supporting NAFTA of almost 100% for Democratic senators and almost 0% for Republicans. An obvious solution in such a situation is to re-estimate the results for the homogeneous states separately for Democratic and Republican senators. Given the resulting small number of observations and relatively large number of independent variables, this is simply not an appropriate procedure.
  14. Replacing our measure of constituent ideology with Erikson et al. (1993) measure of mean state liberalism produces an even more significant result for constituent ideology. Replacing our measure of constituent opinion on exports with the percentage of the 1992 presidential vote for H. Ross Perot increases the significance level, although the Perot measure just misses significance at the 0.05 level. To test Fenno's (1978) argument that legislators respond to an electoral sub constituency, as opposed to their entire legal constituency, we also re-estimated the results for homogeneous states using Erikson et al. (1993) measure of state ideology for members of the senator's political party plus independents (i.e., for a Democratic senator this would be Democrats plus independents). The results were not statistically significant.

## References

- Achen, C.H., 1978. Measuring representation. *American Journal of Political Science* 22, 475–510.
- Arnold, R.D., 1990. *The Logic of Congressional Action*. New Haven: Yale University Press.
- Arnold, R.D., 1993. Can inattentive citizens control their elected representatives? In: Dodd, L.C., Oppenheimer, B.I. (Eds.), *Congress Reconsidered*, 5th ed. CQ Press, Washington, DC.
- Bailey, M., Brady, D.W., 1998. Heterogeneity and representation: the senate and free trade. *American Journal of Political Science* 42, 524–544.
- Bartels, L.M., 1991. Constituency opinion and congressional policymaking: the Reagan Defense Buildup. *American Political Science Review* 85, 457–74.
- Bernstein, R.A., 1989. *Elections, Representation, and Congressional Voting Behavior: The Myth of Constituency Control*. Prentice-Hall, Englewood Cliffs.
- Bernstein, R.A., William, V.A., 1974. The ABM issue in the senate 1968–1970: the importance of ideology. *American Political Science Review* 68, 1198–1206.
- Clausen, A., 1973. *How Congressmen Decide: A Policy Focus*. St. Martins Press, New York.
- Cnudde, C., McCrone, D., 1966. The linkages between constituency attitudes and congressional voting behavior: a causal model. *American Political Science Review* 60, 66–72.
- Converse, P.E., 1964. The nature of belief systems in mass publics. In: Apter, D.E. (Ed.), *Ideology and Discontent*.
- CQ Weekly Reports. Congressional Quarterly Inc, Washington, DC.
- Dougan, W.R., Munger, M.C., 1989. The rationality of ideology. *Journal of Law and Economics* 32, 119–142.
- Duncan, P., 1993. Perot gores his own ox in debate. *CQ Weekly Report*, November 13, 3105.
- Erikson, R.S., 1978. Constituency opinion and congressional behavior: a re-examination of the Miller- Stokes Data. *American Journal of Political Science* 22, 511–535.
- Erikson, R.S., Wright, G.C., McGiver, J.P., 1993. *Statehouse Democracy: Public Opinion and Policy in the United States*. Cambridge University Press, Cambridge.
- Fenno, R.F., 1978. *Home Style: Representation in Their Districts*. Little, Brown, Boston.
- Froman, L., 1963. *Congressman and Their Constituencies*. Rand-McNally, Chicago.
- Goff, B.L., Grier, K.B., 1993. On the (Mis)measurement of legislator ideology and shirking. *Public Choice* 76, 5–20.
- Hibbs, D.A., 1987. *The American Political Economy*. Harvard University Press, Cambridge.
- Hirsch, B., Macpherson, D., 1994. *Union Membership and Earnings Data Book 1993: Compilations from the Current Population Survey*. Bureau of National Affairs, Washington, DC.
- Holian, D.B., Krebs, T.B., Walsh, M.H., 1997. Constituency opinion, Ross Perot, and roll-call behavior in the U.S. House: the case of NAFTA. *Legislative Studies Quarterly* 22, 369–392.
- Jackson, J.E., King, D.C., 1989. Public goods, private interests, and representation. *American Political Science Review* 83, 1143–1164.
- Kalt, J.P., Zupan, M.A., 1984. Capture and ideology in the economic theory of politics. *American Economic Review* 74, 279–300.
- Kau, J.B., Rubin, P.H., 1979. Self-interest, ideology, and logrolling in congressional voting. *Journal of Law and Economics* 22, 365–384.
- Kau, J.B., Rubin, P.H., 1993. Ideology, voting, and shirking. *Public Choice* 76, 151–172.
- Key, V.O., 1961. *Public Opinion and American Democracy*. Alfred A. Knopf, New York.
- Kinder, D.R., Kiewiet, D.R., 1979. Economic discontent, political behavior: the role of personal grievances, collective economic judgments in congressional voting. *American Journal of Political Science* 23, 495–517.
- Kingdon, J.W., 1973. *Congressmen's Voting Decisions*. Harper and Row, New York.
- Krehbiel, K., 1993. Constituency characteristics and legislative preferences. *Public Choice* 76, 21–37.
- Kuklinski, J.H., 1978. Representativeness and elections: a policy analysis. *American Political Science Review* 72, 165–177.
- Langbein, L.I., 1993. PACs, lobbies and political conflict: the case of gun control. *Public Choice* 77, 551–572.

- Markus, G.B., 1974. Electoral coalitions and senate roll call behavior: an ecological analysis. *American Journal of Political Science* 18, 595–607.
- Mayhew, D.R., 1974. *Congress: The Electoral Connection*. Yale University Press, New Haven.
- Medoff, M.H., Dennis, C.D., Bishin, B.G., 1995. The impact of Legislator and Constituency ideology on voting on the assault weapons ban. *Journal of Socio-Economics* 24, 585–591.
- Miller, W.E., Kinder, D.R., Rosenstone, S.J. and the National Election Studies, 1988. AMERICAN NATIONAL ELECTION STUDY: POOLED SENATE ELECTION STUDY, 1990, 1992 [Computer File]. 2nd release. Ann Arbor, MI: University of Michigan, Center for Political Studies [producer], 1993. Ann Arbor, MI: Inter-University Consortium for Political and Social Research [distributor], 1993.
- Miller, W., Stokes, D.E., 1963. Constituency influence in Congress. *American Political Science Review* 57, 45–56.
- Page, B.I., Shapiro, R.Y., Gronke, P., Rosenberg, R.M., 1984. Constituency, party, and representation in Congress. *Public Opinion Quarterly* 48, 741–756.
- Peltzman, S., 1984. Constituent interest and congressional voting. *Journal of Law and Economics* 27, 181–210.
- Peltzman, S., 1985. An economic interpretation of congressional voting in the twentieth century. *American Economic Review* 75, 656–75.
- Poole, K.T., Rosenthal, H., 1997. *Congress: A Political-Economic History of Roll Call Voting*. Oxford University Press, New York.
- Richardson J.R., Richardson, L.E., Munger, M.C., 1990. Shirking, representation, and congressional behavior: voting on the 1983 Amendments to the Social Security Act. *Public Choice* 11–33.
- Snyder, J.M., Jr., 1992. Artificial extremism in interest group ratings. *Legislative Studies Quarterly* 17, 319–345.
- Stigler, G., 1971. The theory of economic regulation. *Bell Journal of Economics and Management* 2, 3–21.
- U.S. Department of Commerce, 1991. *State and Metropolitan Area Data Book*. U.S. Government Printing Office, Washington, DC.
- Wright, G.C., 1989. Policy voting in the US Senate: who is represented? *Legislative Studies Quarterly* 14, 465–486.