

Dynamic Responsiveness in the U.S. Congress: Evidence from NAFTA

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Abstract

Do incumbent politicians adapt their policy positions in response to changes in public opinion? Existing studies of dynamic responsiveness cannot account for changes in the legislative agenda in Congress over time. We exploit an original dataset on the positions of members of Congress on the North American Free Trade Agreement (NAFTA) at various points leading up to the November 1993 roll-call vote and generate original estimates of constituency public opinion using multi-level regression and post-stratification (MRP). We track whether legislator positioning responds to changes in constituency opinion. We find no evidence of responsiveness to shifting public opinion on NAFTA. Our findings suggest a deficit of dynamic responsiveness in the United States Congress.

Introduction

Are incumbents responsive to changes in constituency opinion over time? The idea that shifting constituency preferences should yield corresponding changes in government policy (“dynamic responsiveness”) is a fundamental tenet of normative democratic theory. Some studies have shown that policy is responsive to public opinion (Canes-Wrone, 2006, 2015; Erikson, MacKuen and Stimson, 2002; Trounstein, 2010). However, others have suggested that there is a representational inertia such that there might be persistent mismatches between districts and representatives (Anzia, 2011; Bafumi and Herron, 2010; Lax and Phillips, 2012; Lee, Moretti and Butler, 2004; McCarty, Poole and Rosenthal, 2009).

Most existing studies of dynamic responsiveness measure the association between constituency opinion and policy passage or roll-call voting over time (Caughey and Warshaw, 2018; Fowler, 2005; Lee, Moretti and Butler, 2004; Stimson, MacKuen and Erikson, 1995; Warshaw, 2016). However, these studies are unable to control for the issue agenda across time. In these contexts, it is unclear whether an increase in responsiveness can be attributed to actual movement of legislator positioning on the *same* issue over time, rather than changes in which issues are on the legislative agenda. Furthermore, some studies examine responsiveness by treating different bills as indicating the same policy (e.g. pro-LGBT bills). Scaling different bills requires making assumptions about whether the bills belong to the same dimension.

We resolve these concerns by exploiting time-series data on legislator positioning on the North American Free Trade Agreement (NAFTA) throughout 1993. Various interest groups had surveyed members of the House at different time periods in the lead-up to the passage of NAFTA in November 1993. Using these legislator surveys and contemporaneous surveys of public opinion, we look at the effect of changes in constituency opinion on changes in legislator positioning. This design contributes to the literature in a few ways. First, we are able to hold the issue category constant. All the legislator positions were recorded on NAFTA; to the extent that the bill had undergone changes over the course of the year, we have additional data on legislator concerns (on policy components that changed over time) that we can control for in the analysis. Second, using multi-level

regression and post-stratification (MRP), we have created original estimates of public opinion at the constituency-level for districts in the House. Third, we provide a relatively rare look at changing legislator positions on a specific bill over time, and we are able to isolate the effect of one possible determinant of roll-call voting - constituency opinion. We should note here that there are multiple determinants of roll-call voting outside of constituency opinion, and we are specifically zeroing in on one possible determinant that may be present here. One other caveat here is that our analysis is naturally limited by the granularity of our data in the year of 1993. To this end, we have collected as much data on public opinion and legislator positioning as possible on NAFTA. We have surveys of mass opinion that in total include more than 15,000 respondents, and we have five separate detailed surveys of legislators in the House over time.

To measure adaptation, we exploit unique original data on the evolution of positioning on NAFTA by members of Congress as measured by legislator surveys conducted by a group called USA-NAFTA in March, June and September 1993, and October and November positioning data from Congress Daily and the Associated Press. Moreover, we directly account for shifts in legislator positioning due to changes in the NAFTA legislation by using concerns about the bill that legislators spelled out in an open-ended section of the survey. For example, we code whether legislators had concerns about labor, sugar, and the environment, which directly relate to and may have been later addressed by the side-agreements to NAFTA.

We find no evidence of legislator adaptation to shifting constituency opinion. Following our analysis, we provide evidence that interest group pressure is most likely the primary source of the non-responsiveness of legislators to shifting opinion. Given the unusually high salience of NAFTA, the lack of incumbent adaptation for this bill suggests that it is likely members of Congress are less adaptive on lesser-known pieces of legislation as well.

Data

Independent variable

Our primary independent variable is the (change in) constituency public opinion, which we measure by using MRP on survey data. We gathered several public opinion surveys from 1993 that explicitly asked survey respondents if they support or oppose NAFTA. We use the surveys shown in Table A.2 and pool them together. This method comes in two stages. The first stage regresses support for NAFTA on various individual-level (race, education, and gender) and geographic-level characteristics (median income, percent of senior individuals, percent that is born outside the U.S., and percent that works in agriculture).¹ Moreover, since we want to examine opinion change over time, we model random effects for each month in our data and introduce a linear time trend. This allows us to “borrow” information from time periods that have more data to produce estimates for periods in which the data is more sparse (Gelman et al., 2018). Then, we calculate predicted probabilities for each demographic-geographic-period type and aggregate these probabilities by their corresponding levels recorded in the Census.

We only use surveys that have certain demographic characteristics, like education, race, and gender, and geographic indicators. In total, we have more than 15,000 respondents. Moreover, since the surveys that we use do not contain district-specific indicators (as is common for many surveys in this time period), we use the cross-level method developed in Krimmel, Lax and Phillips (2016) that uses state-level indicators and district-level characteristics for post-stratification. The formal details behind the estimation of these opinion estimates is described in the Appendix.²

Outcome variable

Our outcome variable is the (change in) each legislator’s position on NAFTA. To measure the dynamic change in congressional attitudes, we draw from a series of congressional surveys con-

¹We include the percentage of senior individuals and median income because age and income are often conceived as being strong predictors of political preferences. Moreover, the percent of agriculture workers is included because occupation predicts political preferences, particularly on trade. Finally, immigration status is also predictive of political preferences.

²We also look at responsiveness to sub-constituencies like co-partisans in the Appendix and similarly find no responsiveness to that group as well.

ducted by the U.S. Alliance for NAFTA (USA*NAFTA), *Congress Daily*, and *the Associated Press* throughout the year of 1993. The surveys rank each member's attitude on NAFTA on a scale from one to five. In our empirical analysis, we reverse code this measure such that higher values indicate higher levels of support (1 = oppose, 2 = leaning opposed, 3 = undecided/uncommitted, 4 = leaning in favor, 5 = support).

To capture members' early attitudes on NAFTA in March, June, and September 1993, we exploit a set of confidential surveys conducted by the USA*NAFTA coalition. The USA*NAFTA is a coalition of more than 1,100 pro-NAFTA business groups. They conducted internal and confidential surveys to gauge congressional attitudes on NAFTA running up to the final congressional votes on the NAFTA Implementation Act. The surveys were conducted based on "visits to legislators in Washington, and in their districts by coalition members (Inside U.S. Trade April 9, 1993: S-2)." The coalition began the polling process in March 1993, until the final House votes on the NAFTA Implementation Act in November 17, 1993. We retrieved the surveys from *Inside U.S. Trade*, a trade journal. Because the coalition treated the survey results as highly confidential, the journal featured the legislative surveys only twice in the year of 1993: March 11 survey in the issue published on April 9, 1993, and September 20 survey on its October 1 issue. In addition, we retrieved the USA*NAFTA's confidential surveys of both House members and Senators, dated June 16, from the Clinton Digital Library Archives. Although other pollsters conducted similar vote counts closer to November, the USA*NAFTA surveys provide a rare opportunity to gauge members' baseline attitudes on NAFTA after the agreement was signed among Canada, Mexico, and the U.S. in December 1992.³⁴

We use legislative surveys conducted by *Congress Daily* and *the Associated Press* for the

³One concern about this set of surveys might be that legislator positions are motivated by social desirability bias. Legislators might have taken positions in favor of NAFTA (i.e. "cheap talk") to please the U.S. Alliance for NAFTA, especially because the surveys were confidential. To negate these concerns, we assess the relationship between the legislator scores on the USA*NAFTA surveys and legislator signing of public pro- and anti-NAFTA letters in the Appendix. See Tables D.6, D.7, and D.8 in the Appendix.

⁴Furthermore, original legislator positions (March) are positively correlated with the economic interests of the district (proxied by the proportion of college graduates in the district, correlation = .23), indicating that the March survey is unlikely to suffer from social desirability bias.

months of October and November.⁵ These surveys rank House members' attitudes on NAFTA on the same scale as the USA*NAFTA survey (Yes; Leaning Yes; Uncommitted; Leaning No; No).⁶ We can confirm the reliability of the November positioning data, as it closely matches subsequent roll call voting (there is a correlation of .863 between the November positioning scores and the actual roll call votes in the House).

Our data search process covered both publicly available media sources and confidential historical records⁷. First, we explored the media coverage of NAFTA in the year of 1993 through *LexisNexis* database. Through this investigation, we retrieved the October and November surveys of House members' attitudes on NAFTA. Second, we examined all the issues of *Inside U.S. Trade*, the major trade journal that extensively covered the NAFTA legislation process. In this investigation of the entire issues published in 1993, we retrieved the USA*NAFTA survey conducted in March and September. Lastly, we thoroughly investigated the Clinton Presidential Records. As the Clinton administration coordinated closely with the USA*NAFTA coalition, the coalition shared the June 16 survey results with the administration. The survey data is now publicly available through a Freedom of Information Act request.⁸

⁵On September 28, the Clinton administration informed the House and Senate leadership of its intention to submit the NAFTA Implementation Act in November. Since the notification, major media pollsters (e.g. *the Associated Press*) began conducting legislative surveys. Due to the availability of other media-led legislative polling by the time, the USA*NAFTA survey was not featured in *Inside U.S. Trade*.

⁶The Congress Daily results are based on "telephone calls to the offices of almost 400 members, along with recent public statements by some legislators." (October 22, 1993). Complete Results Of CongressDaily's NAFTA Poll. National Journal's CongressDaily.

⁷See Table A.3 in Appendix

⁸In the June 16 survey, there are 46 missing observations (24 House members in New York, 18 in Texas, three in Tennessee, and one in California). Except for California, the missingness is due to the accidental omission of two pages of the House survey in the Presidential Records. The information on California's 17th district is missing because the seat was vacant in the survey time period; Missing data in the March survey: there are eight missing observations in this survey. Three members—Sam Farr, Benni Thompson, and Peter Barca—assumed office after the survey date. The five remaining missing observations were randomly removed from the primary source. These are four Wisconsin districts (6th-9th districts), and Wyoming.

Main Results

We now turn to examining whether changes in constituency opinion yield corresponding shifts in positioning by legislators. In Table 1, we regress changes in legislator positioning over time on changes in constituency opinion over time. We find no evidence that legislators adapt their positions to district preferences.

Table 1: Constituency Opinion and Legislator Positioning

	<i>Dependent variable:</i>
	Change in Legislator Support
Change in Overall Support	-0.014 (0.020)
Period Fixed Effects	Yes
Observations	1,637
Adjusted R ²	0.067

Note: *p<0.1; **p<0.05; ***p<0.01

Figure 1 shows that there is no relationship between change in constituency support and change in legislator support, in any period or for either party. The x-axis denotes change in constituency support for NAFTA (%). The y-axis is change in legislative support for NAFTA. Because we measure legislative support on a 1 to 5 scale, +1 means an individual legislator increases their support by one level (e.g., uncommitted to leaning favor). Most notably, the lower-left plot (September to October) shows that there is a meaningful positive shift in public opinion on NAFTA of 4-10 percentage points in this period. The shift can be explained by the Clinton administration's efforts to conclude labor and environmental side deals to assuage the public antipathy to NAFTA (conclusion date: September 14). Despite the positive shift in constituency support, congressional Democrats did not increase their support dramatically while their Republican peers remained largely unmoved.

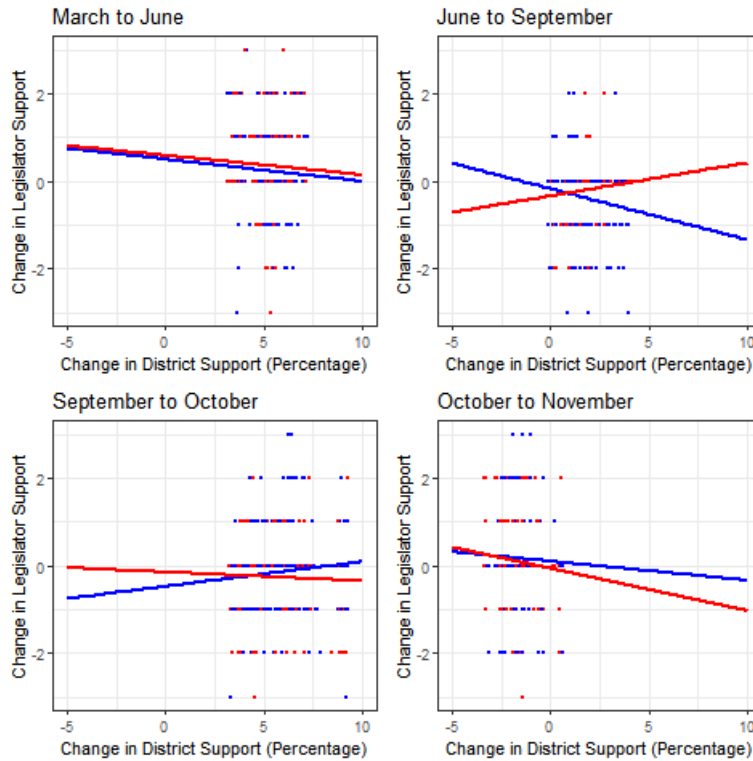


Figure 1: *Change in Overall Constituency Opinion and Change in Legislator Support*

Accounting for Members' Policy Concerns

In the months leading up to the vote, the Clinton administration revised the NAFTA Implementation Act to expand the pro-NAFTA coalition in Congress: they negotiated labor and environment side agreements with Mexico and Canada and exchanged side letters on agriculture with Mexico. The USA*NAFTA surveys allow us to control for these specific policy concerns on labor, agriculture, and the environment. The USA*NAFTA surveys record each member's concerns about NAFTA in the open-ended comments/concerns section. For example, the then House Democrats representing Hawaii, Neil Abercrombie (D-1) and Patsy Mink (D-2), listed "sugar" as their concerns about NAFTA. In particular, we coded comments by legislators as to their concerns about NAFTA in the survey conducted on June 16. Given that the Clinton administration negotiated the side agreements on labor, sugar, and the environment, we can control for whether legislators' concerns on these issues were addressed by the side agreements. Environment, Jobs, and Sugar

are binary variables that capture members' concerns about those issues. We find no evidence that controlling for these policy concerns shifts the relationship between opinion and positioning in either period (See Table C.4 and Table C.5 in the Appendix).

Discussion

Our analysis does not find evidence of legislative adaptation to shifting constituency opinion. There is another plausible mechanism through which legislators may update their positions: interest group lobbies.

Qualitative evidence indicates that interest groups and vocal minorities might have played a more important role in legislative adaptation than party pressure and public opinion. Especially closer to the final vote, we find evidence that members tended to consider the preferences of interest groups or vocal voters more importantly than those of their overall constituencies. In the September survey, members frequently mention that they need to hear from businesses in their districts.⁹ For example, Representative Anna Eshoo (D-14) said that she “wants businesses to communicate support to her.” Similarly, Representative Marge Roukema (R-5) commented that she was “still undecided and needs more signals from industry to justify a pro-NAFTA decision.” Furthermore, members tend to prioritize the preferences of vocal voters who submit letters and make phone calls, who may have distinct preferences from the overall constituency. Specifically, Representative Julian Dixon (D-32) said he didn't “receive pro-NAFTA letters from constituents.” Altogether, these observations raise the possibility that adaptation occurs through responsiveness to interest groups and vocal minorities, rather than to public opinion.

Our findings might be generalizable to explain other trade agreements. NAFTA is arguably an easy case for dynamic responsiveness, as it was one of the most politically salient trade agreements in recent memory. The public perhaps had better knowledge on NAFTA than any other trade agreements that the U.S. government negotiated, and an extensive public debate dominated the news cycle. Because legislators did not adapt their positions on NAFTA in accordance with shifting

⁹U.S.A.-NAFTA Sept. 20 Survey (October 1, 1993). *Inside U.S. Trade*. p.S2-S13.

constituency opinion in this highly salient case, we can infer that incumbent adaptation is even less likely in other less-salient trade agreements. However, our findings may not generalize to other issue areas, as Pomirchy and Schonfeld (2020) find that members of the House are less responsive to their constituency (or copartisan constituencies) on trade than they are on other foreign policy issues like security and immigration—though they find stronger cross-sectional responsiveness on NAFTA than on other trade bills.

Despite its first order importance for normative democratic theory, the relationship between shifting constituency opinion and the positioning of representatives has proved elusive. In this paper, we exploited unique data on the positioning of legislators on NAFTA at various points in time leading up to the November roll-call vote. We also generated original estimates of constituency level preferences on NAFTA at various different times in 1993. Our approach allowed us to hold the particular legislative environment and policy constant while assessing evolving constituency opinion and legislator positioning. We find no evidence of dynamic responsiveness to the median voter.

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Appendix

A Legislator and Public Opinion Survey Data

In Table A.2, we describe the public opinion surveys that we collected by survey source, survey date, and sample size. These surveys all contained questions about NAFTA and relevant demographic/geographic characteristics. In Table A.3, we show the surveys of legislators on their positions on NAFTA in 1993.

Table A.2: NAFTA Survey Data (1993)

Survey Source	Survey Date	Sample Size
Los Angeles Times	January 14-17	1,735
Gallup/CNN/USA Today	March 29-31	1,000
Yankelovich/Time Magazine/CNN	May 26-27	800
Yankelovich/Time Magazine/CNN	June 17-21	901
CBS News	August 2-3	870
Yankelovich/Time Magazine/CNN	September 8-9	1,108
NBC News/Wall Street Journal	September 10-13	1,006
CBS News/NY Times	September 16-19	1,136
ABC News	September 16-19	1,006
Times Mirror	September 24-27	1,529
Los Angeles Times	September 25-28	1,491
Gallup/CNN/USA Today	November 2-4	1,003
Yankelovich/Time Magazine/CNN	November 11	500
CBS News/NY Times	November 11-14	1,334
	Total:	15,419

Table A.3: Legislator Survey Data (1993)

Survey Date	Source
March 11, 1993	U.S. Alliance for NAFTA (Retrieved from Inside U.S. Trade)
June 16, 1993	U.S. Alliance for NAFTA (Retrieved from the Clinton Presidential Library Archive)
September 20, 1993	U.S. Alliance for NAFTA (Retrieved from Inside U.S. Trade)
October, 1993	Congress Daily (Retrieved from National Journal’s Congress Daily)
November 15, 1993	The Associated Press (Retrieved from USA Today)

B Estimation

To measure public opinion on NAFTA at the constituency level, we use multi-level regression and post-stratification (MRP). This method has two steps. In the first step, using survey data, we regress respondents’ support for NAFTA on various individual-level demographic characteristics, specifically gender, education, and race, and a constituency-level intercept, which is itself modeled as a function of constituency-level predictors, including the proportion of senior individuals, median income, percentage of agriculture workers, and percent foreign born. Given the results of the multi-level regression, we calculate predicted probabilities for each demographic-geographic type in our specification and weight these predicted probabilities by their recorded value in the Census.

One issue in calculating estimates at the House level is that polls do not often include district-level indicators. Instead, they only provide state-level descriptors. To deal with this, we use an existing method called “cross-level MRP” (Krimmel, Lax and Phillips, 2016), where state-level values are used in the multi-level regression stage and district-level values are used to post-stratify. For example, one district-level predictor we use is median income. Since we do not know the district that a particular respondent belongs to, we instead use median income for the state that the respondent belongs to instead in the multi-level regression. When post-stratifying, however, we use the coefficient for median income from the regression and *district-level* median income. Thus, we are modeling the geographic variables at the state level but using district values when

post-stratifying to extrapolate from the geographic patterns in the data to all districts.

We regress support for NAFTA on several individual-level and state-level predictors. Denote support for NAFTA by Y_i for a given individual i . This value is either 1 if the individual supports the trade agreement or 0 if the individual opposes it.¹⁰ The individual-level predictors are race (“White,” “Black,” “Hispanic,” and “Other”), education (“No HS,” “High school graduate,” “Some college,” and “College graduate,”), and gender (“Female” and “Male”). Formally, we use the following specification:

$$Pr(Y_i = 1) = \text{logit}^{-1}(\beta^0 + \beta^{female} * female_i + \alpha_{k[i]}^{race} + \alpha_{l[i]}^{educ} + \alpha_{j[i]}^{state} + \alpha_{m[i]}^{month} + \alpha_{r[i]}^{month:state} + \beta^{time} * time + \alpha_{p[i]}^{poll})$$

where k denotes the category of race that respondent i falls into, l denotes the category of education i belongs to, j denotes the state that i resides in, m denotes the month of the survey, r denotes the month-state, and p denotes the poll that i is responding to. The district intercepts are modeled as a function of district-level predictors:

$$\alpha_j^{state} \sim N(\beta^{med.income} * med.income_j + \beta^{senior.prop} * senior.prop_j + \beta^{agriculture.prop} * agriculture.prop_j + \beta^{foreign.prop} * foreign.prop_j, \sigma_{state}^2)$$

To clarify, the variance of the state coefficient is constant across all states. Furthermore, the fol-

¹⁰Respondents who said don’t know or that they hadn’t heard enough are counted as missing.

lowing individual-level and geographic-level coefficients are modeled as follows:

$$\begin{aligned}
\alpha_k^{race} &\sim N(0, \sigma_{race}^2) && \text{for } k = 1, \dots, 4 \\
\alpha_l^{educ} &\sim N(0, \sigma_{educ}^2) && \text{for } l = 1, \dots, 4 \\
\alpha_n^{party} &\sim N(0, \sigma_{party}^2) && \text{for } n = 1, \dots, 3 \\
\alpha_p^{poll} &\sim N(0, \sigma_{poll}^2) && \text{for } p \in \mathbb{R}_+ \\
\alpha_j^{state} &\sim N(0, \sigma_{state}^2) && \text{for } j = 1, \dots, 51 \\
\alpha_m^{month} &\sim N(0, \sigma_{month}^2) && \text{for } m = 1, \dots, 7 \\
\alpha_r^{month:state} &\sim N(0, \sigma_{month:state}^2) && \text{for } r = 1, \dots, 357
\end{aligned}$$

The state variable includes all 50 states plus the District of Columbia. Using these results, we calculated the predicted probability of supporting the policy for each demographic-geographic type and used Census data to post-stratify. Given 436 districts (435 U.S. House districts plus the District of Columbia), 2 gender categories, 4 race groups, 4 education groups, and 3 parties, we have $436 * 2 * 4 * 4 * 3 = 41,856$ demographic-geographic types. Using the model estimated above for respondent preferences, we calculated predicted probabilities for each of these 41,856 categories, for each of the relevant months in our analysis.¹¹

We weight these probabilities by the recorded population level listed in the Census. Thus, if d denotes a particular congressional district, $\hat{\theta}_j$ is the predicted probability for a given cell j , N_j is the Census population size for cell j , and \hat{y}_d is the proportion of individuals supporting a given policy for district d , then

$$\hat{y}_d = \frac{\sum_{j \in d} N_j \hat{\theta}_j}{\sum_{j \in d} N_j}$$

¹¹For the poll coefficients, we take the average of the intercepts.

C Policy Concerns Tests

In Table C.4 and Table C.5, we show our results while controlling for legislator concerns.

Table C.4: Legislator Change between June and September (Accounting for Policy Concerns)

	<i>Dependent variable:</i>	
	Change in Legislator Support	
Change in Overall Support	0.038	
	(0.041)	
Job Concerns (June)	0.015	
	(0.092)	
Environmental Concerns (June)	-0.055	
	(0.110)	
Sugar Concerns (June)	0.175	
	(0.181)	
Observations	388	
Adjusted R ²	-0.005	
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

Table C.5: Legislator Change between September and October (Accounting for Policy Concerns)

	<i>Dependent variable:</i>	
	Change in Legislator Support	
Change in Overall Support	-0.020	
	(0.028)	
Change in Copartisan Support		-0.025
		(0.026)
Job Concerns (September)	-0.050	-0.027
	(0.100)	(0.103)
Environmental Concerns (September)	0.022	0.064
	(0.124)	(0.126)
Sugar Concerns (September)	0.014	-0.002
	(0.210)	(0.210)
Observations	434	434
Adjusted R ²	-0.008	-0.005
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

D Social Desirability Bias Tests

Because the USA*NAFTA coalition surveys were conducted by a pro-NAFTA association, one might be concerned about social desirability bias in members' responses in the March, June, and

September surveys. For example, an anti-NAFTA member might have been inaccurately recorded as supportive, because the member knew that the canvasser supported NAFTA. Because the surveys were confidential, members might have been more prone to giving responses desired by canvassers. To check if there is any systematic bias of this sort in these surveys, we conduct additional tests.

In particular, we match whether their early public positioning on NAFTA matches with their survey responses. For public positioning, we exploit two data sources: anti-NAFTA caucus membership and members' endorsement of Dear Colleague letters. First, the June survey records whether individual House members belong to the anti-NAFTA caucus. If those anti-NAFTA caucus members' responses are indistinguishable from those of non-members, it indicates that the surveys are prone to social desirability bias. Second, we use members' endorsements of various Dear Colleague letters. For example, let's assume that a member endorsed a Dear Colleague letter in opposition to NAFTA. If they were prone to social desirability bias during the surveys, we expect to find the survey responses of the members who endorsed the anti-NAFTA letter to be indistinguishable from the responses of other Democrats who did not endorse the letter.

Based on the tests, we do not find any sign of social desirability bias in our surveys. We find strong negative associations between anti-NAFTA caucus membership and members' attitudes on NAFTA in our surveys (See Table D.6). Similarly, our results on members' endorsements of anti-NAFTA Dear Colleague letter indicate that members' survey responses are truthful: As expected, we find strong negative associations between House Democrats' endorsements of an anti-NAFTA letter addressed to President Clinton and their survey responses on their support for NAFTA (See Table D.7). Although we are less concerned about pro-NAFTA members' exposure to social desirability bias, we conduct the same set of analyses based on member endorsements of pro-NAFTA Dear Colleague letters among House Democrats (Table D.8). We find strong positive correlations between their endorsements of the pro-NAFTA letters and their pro-NAFTA attitudes recorded in the surveys.

Table D.6: Anti-NAFTA Coalition Membership and Attitudes on NAFTA (House members)

	<i>Dependent variable - Support: 1 (Oppose) -5 (Support)</i>		
	March	June	September
	(1)	(2)	(3)
Anti-NAFTA Caucus	-1.474*** (0.266)	-2.335*** (0.308)	-2.065*** (0.331)
Constant	3.052*** (0.059)	3.388*** (0.068)	3.065*** (0.073)
Observations	381	388	388
R ²	0.075	0.129	0.092
Adjusted R ²	0.072	0.127	0.089
Residual Std. Error	1.131 (df = 379)	1.310 (df = 386)	1.405 (df = 386)
F Statistic	30.654*** (df = 1; 379)	57.394*** (df = 1; 386)	39.011*** (df = 1; 386)

Note: *p<0.1; **p<0.05; ***p<0.01

Table D.7: Anti-NAFTA Dear Colleagues Letter and Attitudes on NAFTA Among House Democrats

	<i>Dependent variable - Support: 1 (Oppose) -5 (Support)</i>		
	March	June	September
	(1)	(2)	(3)
Democrats' Letter	-0.872*** (0.131)	-1.071*** (0.170)	-0.942*** (0.174)
Constant	2.731*** (0.070)	3.025*** (0.090)	2.613*** (0.092)
Observations	224	227	227
R ²	0.166	0.150	0.115
Adjusted R ²	0.162	0.146	0.111
Residual Std. Error	0.888 (df = 222)	1.152 (df = 225)	1.179 (df = 225)
F Statistic	44.039*** (df = 1; 222)	39.730*** (df = 1; 225)	29.313*** (df = 1; 225)

Note: *p<0.1; **p<0.05; ***p<0.01

Table D.8: Pro-NAFTA Dear Colleagues Letter and Attitudes on NAFTA Among House Democrats

	<i>Dependent variable - Support: 1 (Oppose) -5 (Support)</i>		
	March (1)	June (2)	September (3)
Wyden-Matsui Letter	0.904*** (0.158)	1.278*** (0.200)	1.672*** (0.188)
Constant	2.321*** (0.067)	2.497*** (0.084)	2.053*** (0.079)
Observations	224	227	227
R ²	0.128	0.153	0.260
Adjusted R ²	0.124	0.149	0.257
Residual Std. Error	0.908 (df = 222)	1.150 (df = 225)	1.078 (df = 225)
F Statistic	32.589*** (df = 1; 222)	40.652*** (df = 1; 225)	79.234*** (df = 1; 225)

Note:

*p<0.1; **p<0.05; ***p<0.01

E Co-partisan Opinion

In addition to our analysis in this paper, we also examine whether or not co-partisan opinion in affects changes in legislator positioning over time. One issue here is that the Census does not have data on party affiliation. In order to construct estimates that are broken down by partisanship, one has to estimate a breakdown of partisanship by our various demographic variables first. Specifically, the Census only has the number of white women between the ages of 18 and 29 living in the fifth district of New Jersey, but we also need the number of white Republican women between the ages of 18 and 29 living in the fifth district of New Jersey (in addition to the estimates for Democrats and Independents). Thus, we estimate a second MRP where party affiliation is the dependent variable. We first estimate the probability of identifying as a Democrat on our slate of independent variables. Then, we throw out the Democrats and estimate the probability of being a Republican (where the baseline is being an Independent) and deduce the proportion that fall into all

three partisan categories using these two regressions.¹² The results using our co-partisan estimates are shown in Table E.9.

Table E.9: Constituency Opinion and Legislator Positioning

	<i>Dependent variable:</i>
	Change in Legislator Support
Change in Copartisan Support	-0.007 (0.018)
Period Fixed Effects	Yes
Observations	1,637
Adjusted R ²	0.066
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

F Mass and Legislator Opinion on NAFTA Over Time

Below, we provide boxplots of district preferences on NAFTA by partisan sub-constituency (Republicans, Independents and Democrats). We find evidence of a decline in support, especially among Republicans, from January to March, but increased support from June to September and from September to October. In January, Republicans are more supportive than Democrats; by November (the month the bill was voted on), differences across partisan groups in levels of support and geographic dispersion were relatively minor, with Democrats slightly more supportive.

¹²In order to ease concerns that starting our regression with affiliating as a Democrat as our dependent variable may affect results, we conduct the same analysis, with Republicans as our starting dependent variable and average the estimates that arise from the two approaches.

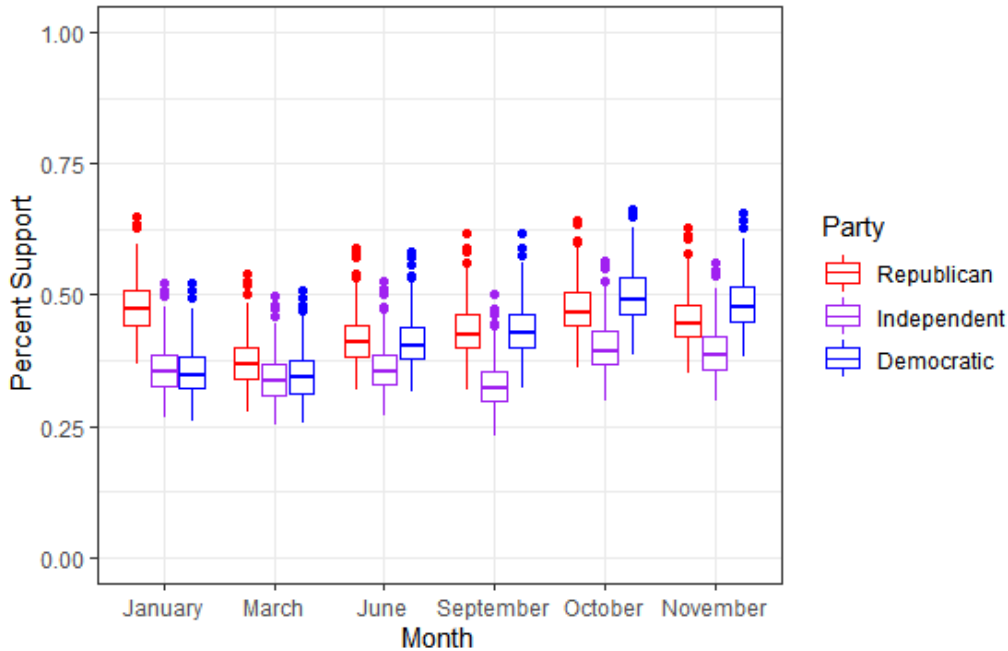


Figure F.2: District Preferences on NAFTA by Partisanship

In parallel, we visualize boxplots of mass preferences on NAFTA. Two points are noteworthy. First, between January and March, we observe a rather persistent partisan divide among legislators (Figure 3), but differences in public opinion between Republicans and Democrats have disappeared (Figure 2), a pattern which has largely persisted until November. The disconnect between constituency preferences and legislative positioning points to the possibility that legislators might have been responding to special interest groups or advocacy groups with extreme partisan preferences. Simultaneously, it is possible that the public initially relied on their partisan heuristics to evaluate NAFTA in January, and adjusted their positions in March as they were exposed to more information on NAFTA. For example, the number of news articles on NAFTA almost doubled from January to March; In September, the NAFTA coverage was approximately six times of the January coverage.¹³

Second, we observe a linear upward trend in public attitudes on NAFTA from March until Octo-

¹³We searched for news articles that contain “NAFTA” and “trade” in the year of 1993, and calculate the monthly count of those articles. NexisLexis, access date: November 25, 2019.

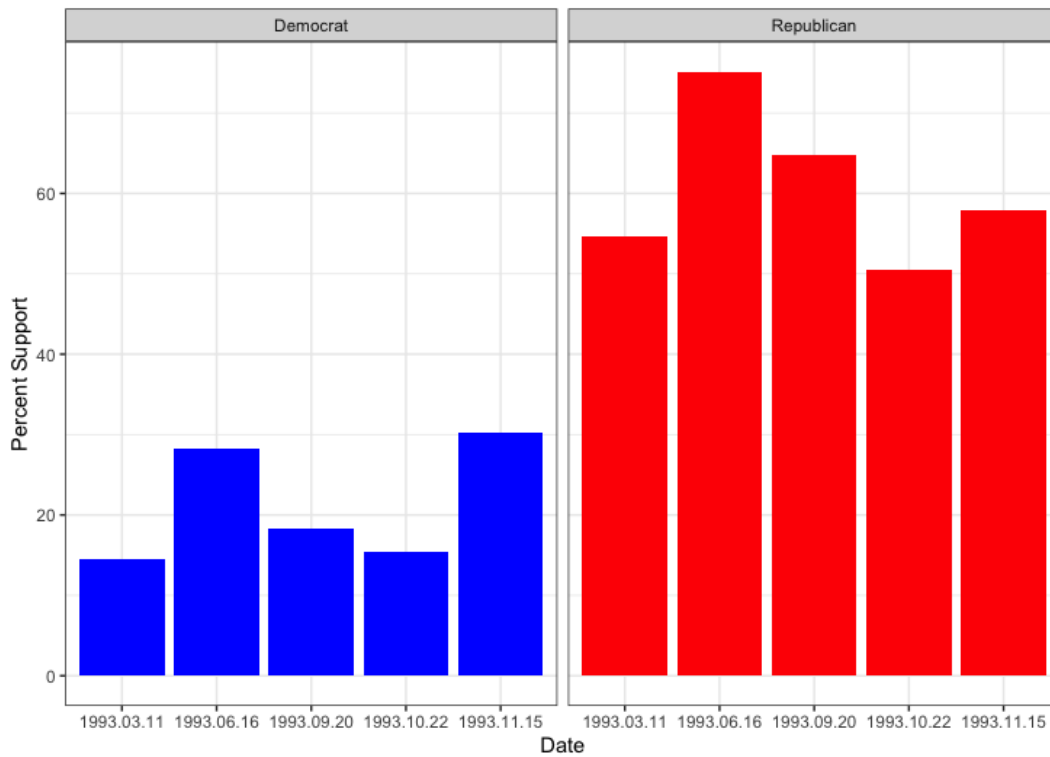


Figure F.3: House Members' Positioning on NAFTA by Party (Supporters are members who score 4 (leaning in favor) or 5 (favor) on the support scale)

ber, whereas legislators tended to temporarily decrease their support after June until they increased their support from October to November. For one thing, the Clinton administration finalized labor and environmental side agreements in September, hoping to increase public support for NAFTA. As the upward trend in September and October in Figure 2 shows, the side agreements appear to have been well received by the general public. However, some legislators with ties to labor and environmental groups were opposed to the side agreements due to their weak enforcement mechanisms. This may indicate that the public and legislators viewed the NAFTA side deals with different levels of sophistication. Also, there were high-level logrolling attempts detached from the public. In July, 105 House Democrats signed a letter urging the president to withhold submission of the NAFTA Implementation Act until the administration passed health care reform legislation.¹⁴ Pro-health care legislators strategically linked NAFTA to healthcare despite the lack of substantive relevance of the two issues, expecting to expedite healthcare reform. However, it is unlikely that this level of cross-issue strategic thinking trickled down to the general public.

¹⁴July 26, 1993. "Request that the president's health care reform proposal be considered by Congress before the North American Free Trade Agreement." Clinton Presidential Records.