Does the U.S. Congress Respond to Public Opinion on Trade?

Abstract

Are U.S. legislators responsive to public opinion on trade? Despite the prevalence of preference-based approaches to international trade, not much work has directly assessed the relationship between constituency opinion and positioning by members of Congress on trade bills. We assess dynamic responsiveness (whether shifting constituency opinion on trade yields corresponding changes among legislators) by exploiting 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. We find no evidence of dynamic responsiveness to shifting constituency opinion on even a highly salient piece of trade legislation. We provide qualitative evidence that interest group influence may instead be the predominant source of shifting legislator positioning on trade.

Word count: 10,206

Keywords: congress, representation, dynamic responsiveness, trade

Introduction

Do American legislators adhere to public opinion when voting on trade issues? While there is already substantial evidence that American legislators are responsive to their constituencies on many policy issues (Canes-Wrone, 2015; Erikson, MacKuen and Stimson, 2002; Stimson, MacKuen and Erikson, 1995a; Trounstine, 2010), trade policy is still a relatively under-studied area for examining legislative responsiveness. In most policy areas, including defense spending, the literature generally finds that legislators are more likely to approve a policy when there is greater constituency support (Bartels, 1991; Erikson, Wright and McIver, 1993; Lax and Phillips, 2009a, 2012). 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).

The idea that shifting constituency preferences should yield corresponding changes in government policy is a fundamental tenet of normative democratic theory. 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, 1995a; Warshaw, 2016). However, there are some challenges researchers face when making temporal comparisons. In particular, it is hard 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 pertaining to the same policy area (e.g. pro-LGBT bills). Scaling different bills requires making assumptions about whether the bills belong to the same dimension.

We resolve these concerns–in the trade context–by exploiting time-series data on legislator positioning throughout 1993 on the North American Free Trade Agreement (NAFTA), one of the most important trade agreements in US history. In particular, we use a unique original set of legislator surveys conducted by a group called USA-NAFTA in March, June and September 1993,

in addition to October and November positioning data from Congress Daily and the Associated Press. An interesting aspect of the data is that we have access to concerns about the bill that legislators spelled out in an open-ended section of the survey, allowing us to account for whether shifts in legislator positioning are attributable to changes in the NAFTA legislation itself. 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. Using these legislator surveys and contemporaneous surveys of public opinion, we look at the relationships between constituency opinion, the content of the bill, and legislator positioning.

This design contributes to the literature in a few ways. First, we are able to look at just one dimension, since all the legislator positions were recorded on NAFTA. Second, to the extent that the bill had undergone changes over the course of the year, we can utilize the aforementioned data on legislator concerns (on policy components that changed over time) to investigate whether legislators most concerned about issues that were addressed in the side agreements were most likely to change their positions. Third, we provide an unusual and relatively rare look at changing legislator positions on a specific bill over time, instead of examining final roll-call votes, and we are able to isolate the role of a few possible determinants, including constituency opinion, of legislative behavior. As we illustrate below, analyzing interim legislator positions can help us understand how legislators gain targeted benefits by changing their positions on legislation and whether changes in legislation, like the side agreements to NAFTA, increased the size of the winning coalition.

There are a few important limitations to our analysis. First, we should note here that there are multiple determinants of roll-call voting (or legislator positioning), and we are specifically zeroing in on a few possible factors that may be present here. Second, 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 we can find on NAFTA. We have 14 surveys of mass opinion that in total include more than 10,000 respondents, and we have five separate detailed surveys of legislators in the House over time. Third, these surveys, both at the legislator and mass levels, have some measurement error, which we try to account for. For instance, we might be

concerned that legislator responses to surveys sponsored by pro-NAFTA organizations might be motivated by social desirability bias; to address 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.

Our main result is that we find no evidence of legislator adaptation to shifting constituency opinion over time. We compare changes in legislator positioning with changes in contemporaneous public opinion and find no evidence of responsiveness. We highlight one particular reason that this might be the case—the influence of interest groups. Studies pinpoint the disproportionate influence of interest groups on trade legislation (Ehrlich, 2008). Scholars have cited interest group behavior as a key influence on legislative decision-making (Fordham and McKeown, 2003; Grossman and Helpman, 2002), and often, interest groups are perceived as altering the direction of responsiveness away from the majority of the public (Anzia, 2011; Gilens, 2012). Given this, it is possible that on bills where there is a lot of interest group activity, like trade bills, we might expect district opinion to matter less than on other issues. Following our analysis, we provide qualitative evidence that interest group pressure is likely a source of the non-responsiveness of legislators to shifting opinion. It is hard to conclusively determine how generalizable our results are to other pieces of legislation, though we suggest some factors that may point in either direction. On the one hand, NAFTA was unusually highly salient, which might suggest that members of Congress may be less adaptive on lesser-known pieces of trade legislation. On the other hand, trade policy is also unlike some other policy areas in that citizens know very little about the complexities of trade agreements, and as mentioned before, interest groups are pivotal players.

Related Literature

Do U.S. legislators adjust their policy positions in response to public opinion on trade? A strand of recent studies critically examines the validity of the assumed link between public preferences and legislative policy stances: Guisinger (2009, 2017) shows that American voters, even those with a

high stake in trade, often fail to hold politicians accountable for their trade policy decisions; Bailey (2001) demonstrates that the American public's diffuse interests in trade liberalization exert little influence on congressional trade voting; and Feigenbaum and Hall (2015)'s findings suggest that U.S. legislators' ability to gain reelection is not affected by localized trade shocks, although they respond to these shocks by voting in a more protectionist direction.

It is crucial to study why legislators are unlikely to respond to public opinion in their trade policy-making process. Studies show that American voters have a weak understanding of the economic consequences of trade (Betz and Pond, 2019; Bearce and Moya, 2020). Specifically, Rho and Tomz (2017) show that most American voters fail to predict the economic consequences of protectionist policies accurately. For example, their survey finds that less than one-third of the respondents correctly identified whether low- or high-educated Americans would benefit from restrictions on imports of low-skill intensive products. They further demonstrate that public attitudes on trade policy change easily depending on information about the winners and losers of trade policy. If public preferences on trade policy are malleable, politicians may have a weak incentive to adjust their policy position due to shifting public opinion.

Alternatively, it is plausible that politicians form their policy position based on the information provided by interest groups with better knowledge and concentrated interests on trade policy. In line with this line of reasoning, studies show that politicians use complex non-tariff barriers (Kono, 2006), ex-post lobbying (You, 2017), or product-specific liberalization (Kim, 2017) to protect interest groups while avoiding criticism from the general public who may not readily understand the effects of policy. Would legislators adjust their decisions despite the public's weak understanding of trade policy? How much can scholars draw from public opinion data to understand final policy outcomes in trade?

We draw from the literature on responsiveness to answer these questions. Studies on responsiveness offer useful insights in analyzing how voter preferences translate into legislative decisions. The literature tends to find stronger evidence of policy responsiveness in the domain of social policies (Lax and Phillips, 2009a; Lax, Phillips and Zelizer, 2019; Erikson, Wright and McIver, 1993)

than on economic issues (Caughey and Warshaw, 2018; Pacheco, 2013). The rather large literature on responsiveness shows a strong positive relationship between constituency opinion and policy; for a review, see Canes-Wrone (2015). Legislators may be particularly responsive to important subgroups, like co-partisans (Kastellec et al., 2015) or attentive publics (Arnold, 1990). Furthermore, members of Congress are often penalized for deviating from constituency preferences (Ansolabehere and Jones, 2010; Canes-Wrone, Brady and Cogan, 2002), though this electoral penalty appears to have declined in more recent years (Bonica and Cox, 2018). On the other hand, there is evidence to suggest that substantive representation may be deficient in the US Congress. In particular, there are wide gaps between Republicans and Democrats in terms of roll-call voting (Bafumi and Herron, 2010; Lee, Moretti and Butler, 2004; McCarty, Poole and Rosenthal, 2009), which suggests a lack of convergence to the median of each district.

Moreover, there have been several studies specifically analyzing roll-call voting patterns on NAFTA (e.g., Bailey and Brady 1998; Dennis, Bishin and Nicolaou 2000; Holian, Krebs and Walsh 1997; Kahane 1996; Uslaner 1998; Wink, Livingston and Garand 1996). These studies largely find evidence that constituency demographics and opinion have an effect on roll-call voting, though in some cases, this is conditional on certain factors, like the homogeneity of districts or the electoral competitiveness of the member's seat. Our paper contributes to this line of literature by focusing on temporal variation in legislator position-taking on NAFTA and constituency concerns.

Finally, we contribute to the literature on opinion estimation by looking at issue-specific responsiveness in the House. Some papers have looked at district-level estimates of opinion (Tausanovitch and Warshaw, 2013; Warshaw and Rodden, 2012) and state-level estimates (Lax and Phillips, 2009b, 2012), but as noted above, there has not been any in-depth examination of trade or foreign policy roll-call votes with respect to public opinion. Moreover, some have looked at subgroup breakdowns using multi-level regression and post-stratification (Kastellec et al., 2015; Lax, Phillips and Zelizer, 2019), with some attention to income and partisan groups.

Theory

The complex distributional effects of trade make it difficult for the public to form strong preferences on trade policy. Unlike social policies with diffuse welfare implications, trade liberalization can have unexpected differential effects on the income prospects of smaller groups with geographically or economically concentrated interests. As noted earlier, recent studies show that American voters have a weak understanding of the economic consequences of trade (Betz and Pond, 2019; Bearce and Moya, 2020). For example, Rho and Tomz (2017) say "if people knew more about the distributional effects of trade, the correlation between personal interests and policy preferences would tighten." Further, the complex nature of contemporary trade policy makes it more difficult for the public to form sophisticated preferences on trade. As such, the complex distributional considerations make trade a "hard issue" for rationally ignorant citizens who are not greatly affected by trade policy (Carmines and Stimson, 1980, 78).

As noted above, the literature on dynamic responsiveness tends to support this theoretical reasoning. Prior studies find stronger evidence of policy responsiveness in the domain of social policies (Lax and Phillips, 2009a; Lax, Phillips and Zelizer, 2019; Erikson, Wright and McIver, 1993) than on economic issues (Caughey and Warshaw, 2018; Pacheco, 2013). Specifically, Caughey and Warshaw (2018) attribute the cross-issue variation to the technical complexity of economic issues and states' dependence on the federal government on economic issues (Caughey and Warshaw, 2018, 252). In the context of education or welfare spending, Pacheco (2013) finds evidence for policy responsiveness only in states with higher levels of legislative professionalism, which enables legislators to accurately gauge constituents' preferences. In contrast, previous scholars find strong evidence in support of policy responsiveness on social issues (i.e. LGBT and reproductive rights) because voters find these issues relatively easier to understand than such complex economic issues as trade agreements.

Dynamic responsiveness, we theorize, is likely to be weak especially in trade politics. Studies on trade politics suggest that the power of interest groups is amplified in the trade policy process as trade has concentrated consequences for a subset of the population. Taking the distributional

considerations seriously, Milner and Tingley (2015) contend that interest groups exercise strong influence on trade policy by lobbying legislators. In this tradition, many scholars have shown how legislators' positions on trade agreements are ultimately shaped by interest groups (Kim, 2017; Osgood, 2017; Owen, 2017). Guisinger (2009) also questions the validity of voter-driven theories of trade policy based on a set of surveys that probe whether voters held their Senate incumbents accountable for their votes on the CAFTA. More specifically, the results in Guisinger's study cast doubt on the critical assumption that "interest group activity leads to more informed voters (Guisinger, 2009, 543)." Altogether, we expect to find little evidence of dynamic responsiveness to constituency opinion.

Dynamics of Legislative Positioning

Moreover, this paper sheds light on the understudied impact of the temporal process by which legislators arrive at a final voting decision. Most studies on dynamic responsiveness, admittedly, focus on how legislators' positions on a single issue evolve over a more extended period, thus privileging over-time votes as the primary outcome variable (Stimson, Mackuen and Erikson, 1995b). Alternatively, we examine micro-foundations of legislative positioning on a single bill over time. This is because changes in legislative positioning during a legislative process can have important policy consequences in two ways.

First, legislative positioning affects the distribution of targeted benefits. The literature on political coalitions demonstrates that, if side-payments are permitted, rational politicians create a minimum winning coalition to pass legislation such that "a minimum of compromise is necessary" (Amadae and Bueno de Mesquita, 1999). In building a minimum winning coalition for NAFTA, the Clinton administration used the over-time surveys to identify undecided members and strategically targeted exclusive benefits (e.g., infrastructure projects) to sway them. Specifically, Public Citizen, a consumer interest group, notes that 76 House members received district benefits during the NAFTA legislation process (Lewis, 1993). Based on the Public Citizen's data, Evans (2004) finds that members who received district benefits were more likely to support NAFTA than those who

7

did not. Those targeted benefits, a byproduct of shifting legislative positioning, had distributional consequences on voter welfare—for example, Rep. Charlie Rose (D-NC) changed his position on NAFTA and ended up supporting the bill literally several hours before the final vote in exchange for the President's promise to reduce the tobacco tax; Rep. Eddie Bernice Johnson (D-TX) announced her support for NAFTA immediately after the Pentagon promised to purchase "two additional C-17 cargo planes—at a cost of $1.4 billion—from the Vought Aircraft factory in her south Dallas district (Lewis, 1993)." In total, Public Citizen estimated the cost of the pro-NAFTA coalition building to be approximately $4.4 billion (Lewis, 1993). Thus illustrated, changes in legislative positioning have crucial distributional consequences on voter welfare; this paper contributes to our understanding of this significant yet understudied topic.

Second, changes in legislative positioning have significant consequences on the design of international agreements. For example, the Clinton administration devised the labor and environmental side agreements during the NAFTA negotiations to sway congressional Democrats. Although the labor and environmental side agreements were an attempt to build a domestic winning coalition in Congress, they had global spillover effects on future trade agreements in two respects. First, several studies show that non-US negotiators have used the NAFTA side deals as a template for their own trade negotiations (Baccini, Dür and Haftel, 2015; Horn, Mavroidis and Sapir, 2010; Morin, Dür and Lechner, 2018). Moreover, studies find that US trade agreements tend to strengthen labor standards and environmental outcomes in trading partner countries (Postnikov and Bastiaens, 2014; Bastiaens and Postnikov, 2017); the NAFTA template is the first in the history of international trade that ensures the legal enforceability of labor and environmental side deals. The executive branch would not have pressured Canada and Mexico into signing off on those strong enforcement mechanisms, had it already secured enough pro-NAFTA votes from pro-environment and pro-labor Democrats within Congress. For example, Lee (2021) finds that the environmental side agreement boosted support for NAFTA from House members in competitive electoral districts. Taken together, it is crucial to study how legislators shift their position on a single bill or agreement to better understand policy processes in democracies.

Assessing Dynamic Responsiveness on NAFTA

Data

We exploit unique data on legislator positioning on NAFTA throughout 1993.

Outcome variable

Our outcome variable is the (change in) each legislator's position on NAFTA. To measure temporal changes in congressional attitudes, we draw from a series of congressional surveys conducted 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: the March 11 survey in the issue published on April 9, 1993, and the 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.[12]

We use legislative surveys conducted by *Congress Daily* and *the Associated Press* for the months of October and November. These surveys rank House members' attitudes on NAFTA on the same scale as the USA*NAFTA survey (Yes; Leaning Yes; Uncommitted; Leaning No; No). 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).[3]

Our data search process covered both publicly available media sources and confidential historical records (Table A5 in the Appendix). 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.[4]

Independent variable

Our primary independent variable is the (change in) constituency public opinion, which we mea-

---

[1]One concern about this set of surveys might be that legislator positions are motivated by social desirability bias. Legislators might have take 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 Table A10 and Table A11 in the Appendix.

[2]Furthermore, 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.

[3]We are confident that the surveys are relatively immune to measurement errors. We find that the positioning scores exhibit high auto-correlations. The correlations between monthly positioning scores are 0.73 (Mar - June), 0.86 (June - Sep), 0.81 (Sep - Oct), 0.85 (Oct - Nov), and 0.86 (Nov - Final votes). If legislators were responding in a haphazard manner, we would not expect auto-correlations of this magnitude.

[4]In 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.

sure by using survey data. We gathered 14 public opinion surveys from 1993 that explicitly asked survey respondents if they support or oppose NAFTA. Table A1 shows information about the surveys that we used, including the name of the survey firm, survey date, survey question, and corresponding sample size.

There are some potential concerns that one might have about these surveys. The first is the relative sample size in each constituency, which when breaking it down by individual time periods, can be fairly small. To leverage all of the survey data that we collected, we use multi-level regression and post-stratification (MRP), which is a common method to estimate preferences (Lax and Phillips, 2009a; Warshaw and Rodden, 2012). The details are provided in the Appendix. This method operates in two steps. First, we regress policy preferences on individual-level (e.g., education, race, and gender) and district-level predictors (e.g., median income, agriculture worker population, etc.) and calculate predicted probabilities for each demographic-geographic type (e.g., college-educated white men in North Dakota). Second, in the post-stratification stage, we aggregate and weight the predicted probabilities according to the corresponding levels in the Census.

Moreover, we only use surveys that have certain demographic characteristics, like education, race, and gender, and geographic indicators. In total, we have more than $10,000$ respondents. Since the surveys that we use to assess responsiveness on NAFTA 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), which uses state-level indicators in the multi-level modeling stage and district-level characteristics to post-stratify.[5] To assuage concerns about the cross-level method, we conduct three validity checks. First, we use the legislator positioning data that we have from the Senate and perform the same analysis as we do for the House. For the Senate, we only have two months of available data on legislator support (June and September), so we do not make this a central part of our analysis. However, in the Appendix, we arrive at substantively similar results for the Senate (and this analysis does not require the cross-level method since we

---

[5]More specifically, the multi-level regression we estimate only uses geographic predictors at the state level, and in the post-stratification, we use district-level values derived from the Census. For example, while median income in each state would be used as a geographic predictor in estimating preferences for NAFTA, we use district-level median income when post-stratifying.

have state-level indicators). Second, we use survey data for two non-NAFTA trade bills that have district-specific indicators for respondents (from the CCES). We show that the correlation between the estimates that arise from opinion estimates using the cross-level method versus when using the traditional method (i.e., using district-level variables in the multi-level modeling stage) is very high ($r > 0.9$). Finally, we measure the cross-sectional relationship between the legislator positions and constituency support and find a strong positive relationship in each month.

Third, we want to be careful that differences in opinion over time are not a function of changes in survey question wording. By examining the survey questions in Table A1, we find that the wording of the survey questions is relatively consistent. One potential concern is that some surveys referred to NAFTA without mentioning Canada as one of the trading partners, whereas other surveys included Canada in the question. One possible reason for this variation in question wording is that in 1993, the US and Canada already had the Canada-US Free Trade Agreement (CUFSTA), a bilateral trade agreement. CUFSTA entered into force in 1989, and NAFTA was designed to supersede CUFSTA. Because CUFSTA was already in force, most observers agreed that domestic opposition to NAFTA was most concerned with Mexico's inclusion. Against this backdrop, some polling companies might have intentionally omitted Canada in their questions. Indeed, when regressing support for NAFTA on the inclusion of "Canada" in the survey question, with controls for respondent demographic variables, like education, gender, and party affiliation, geographic variables, and the time period of the survey, we find that the inclusion of Canada does not affect preferences. Moreover, as an additional check, we construct public opinion estimates only using the surveys that omit any mention of Canada, and we find similar results.

Finally, these measures of constituency opinion may contain some uncertainty, or error, that we want to account for. In particular, estimating preferences via multi-level modeling introduces some noise, especially in smaller samples. To account for this uncertainty in our analysis, we use Bayesian methods to quantify the uncertainty associated with our measures (Gelman et al., 2018). We then incorporate this uncertainty into our main results using 500 simulations. This approach is similar to that in prior studies that have incorporated uncertainty into their MRP estimates (Kastel-

lec et al., 2015; Lax, Phillips and Zelizer, 2019).

Descriptive Statistics

In this section, we explore the data on legislator positioning, legislator concerns, and constituency opinion. First, we look at the legislator positioning data. Figure 1 and Figure 2 visualize members' average support scores by party and state from March to the final votes in November. Figure 1 confirms that there is substantial variation in legislator positioning over time. In particular, the upper panel shows that House Democrats were mostly undecided in March 1993. Their average support score in this period is 2.61. In the same period, House Republicans were slightly more supportive (March support score = 3.69). Out of 254 House Democrats in our data, 83 members (32.6%) increased their support for NAFTA in November, two days before the final vote compared to their March attitudes, while 114 (44.8%) became more negative about NAFTA by November. There are only 57 House Democrats who held their ground. House Republicans also changed their position on the agreement: 29% became negative, 37.2% became positive, and 33.7% remained unchanged in November compared to their attitudes in March.

Figure 3 and Figure 4 visualize how legislators with strong priors shifted their position on NAFTA throughout the policy discussion until the final votes in November. Figure 3 shows that early supporters (mostly Republicans) lowered their support in September and October and then reverted to their original supportive position. For example, David Levy (NM-4, R) was leaning toward the trade agreement in March (Inside U.S. Trade, 1993). Six months later, in September 1993, he was recorded as undecided. The survey's comment section says "[Levy] was leaning in favor but received an earful over the recess & is now undecided (...) May be good policy but bad politics" (Inside U.S. Trade, 1993: S-7). Although he received negative feedback on NAFTA over the summer recess from his constituents, Levy ended up supporting NAFTA at the final vote. Similarly, Figure 4 shows that early opponents remained largely opposed to NAFTA in November despite some upward shift in support in June and September. Altogether, legislators with priors on NAFTA rarely changed their positions despite the feedback they received during the policy
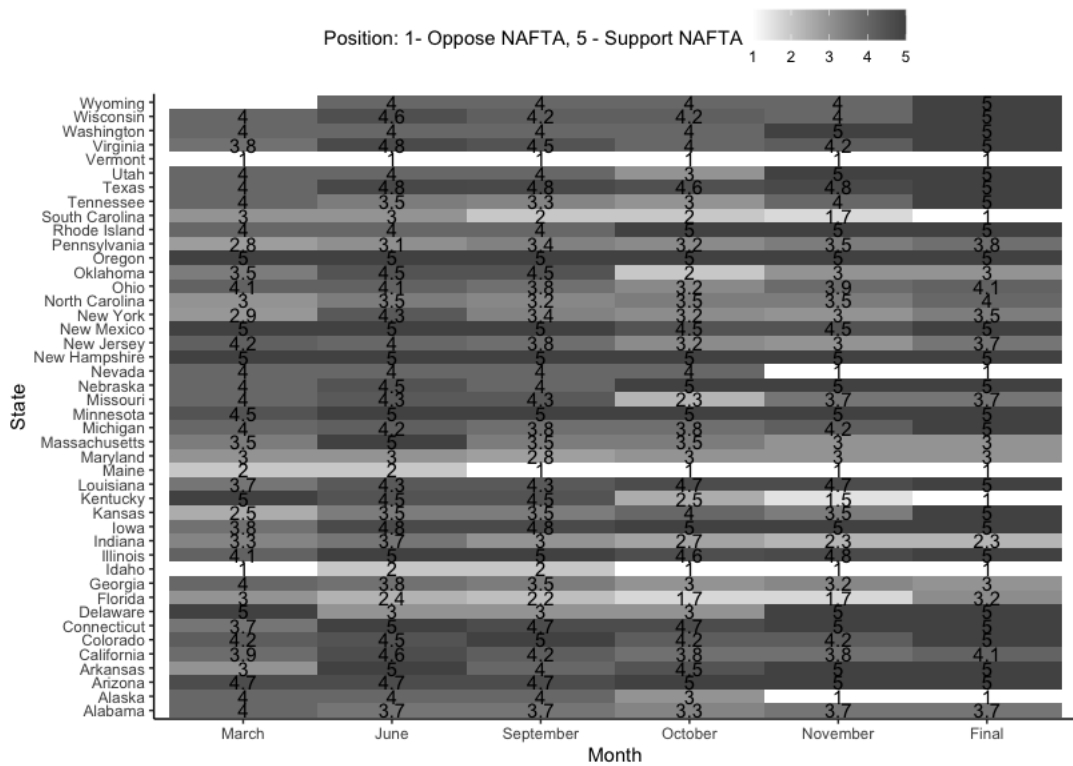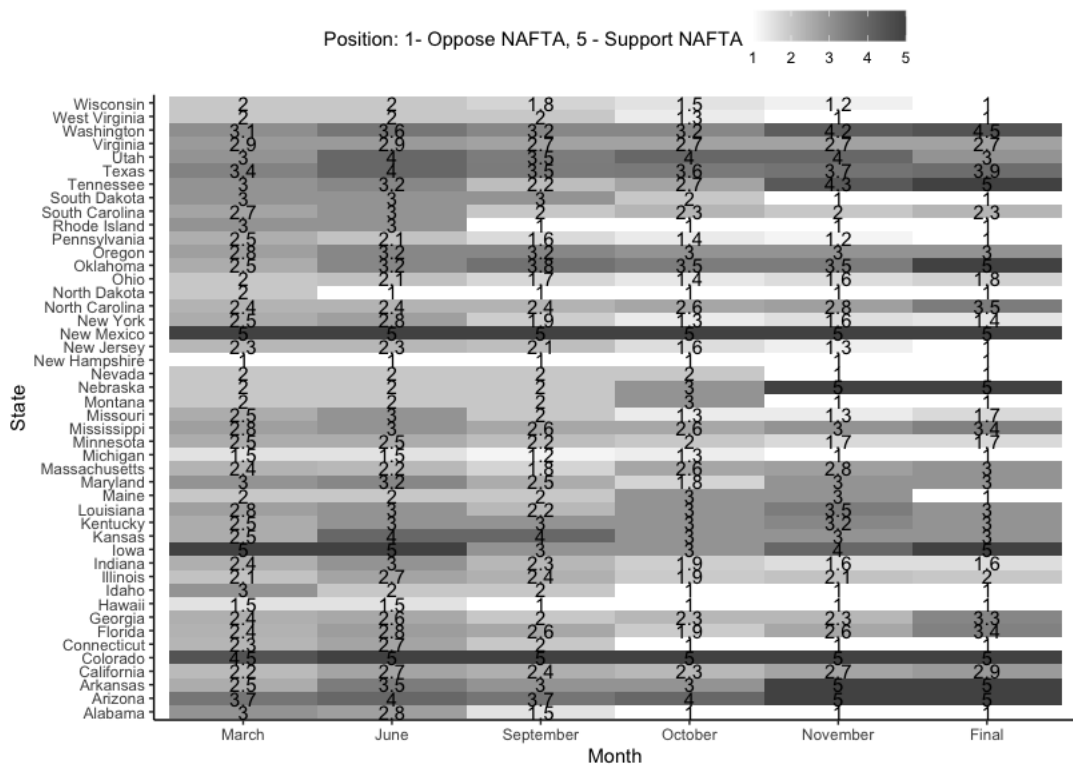
13

Figure 1 Change in Support from March to November by State (The Upper Panel: Democrats; The Lower Panel: Republicans)
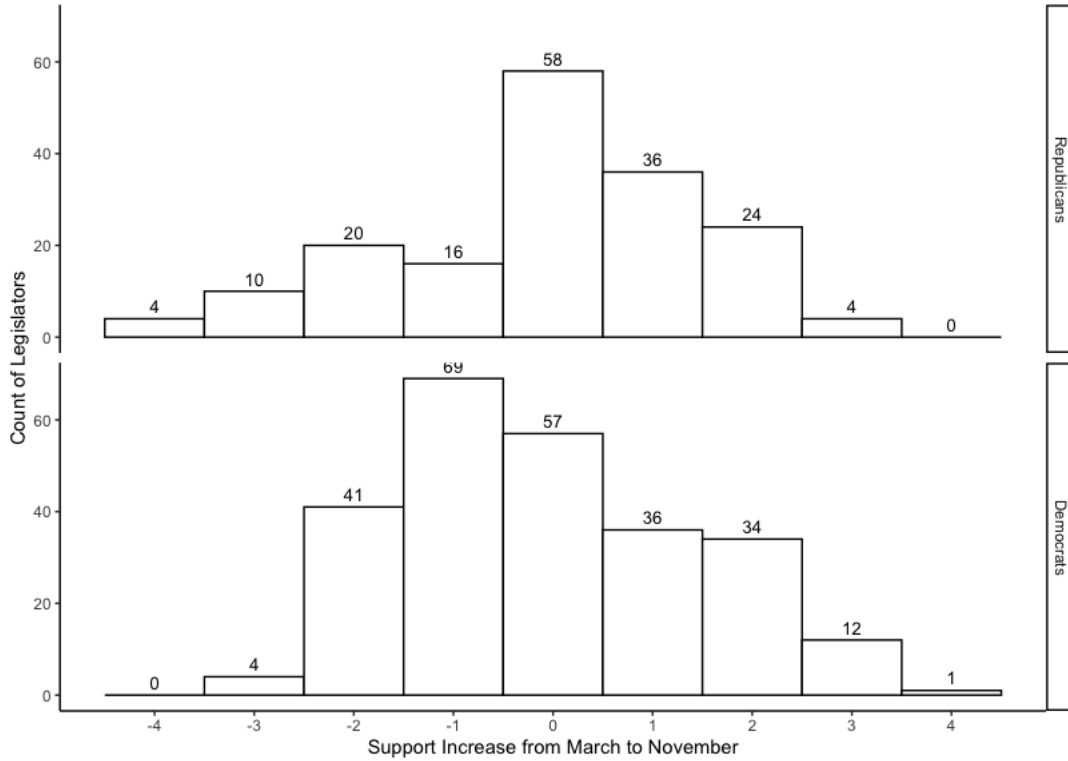
Figure 2 Distribution of Change in Support from March to November

discussion.

Now, we identify determinants of legislator concerns, specifically those relating to labor, agriculture, and sugar. In Table 1, we find that the number of sugar farms is positively related to whether the representative indicated concerns about sugar in September. Similarly, the proportion of agriculture workers is positively related to whether "agriculture" concerns were noted by the representative. However, we do not find that economic conditions are necessarily correlated with concerns about labor and jobs.

Finally, do legislator concerns predict changes in legislator positioning? In particular, the environmental and labor side agreements were instituted in September 1993 to assuage Democratic concerns about NAFTA. Thus, we can ask: are there greater changes in legislator positioning among Democrats with either environment or labor concerns before and after the side agreements? Moreover, additional side agreements on sugar and agricultural products were passed preceding the vote on NAFTA. We can ask a similar question here as well. As Table 2 and Table 3 show,
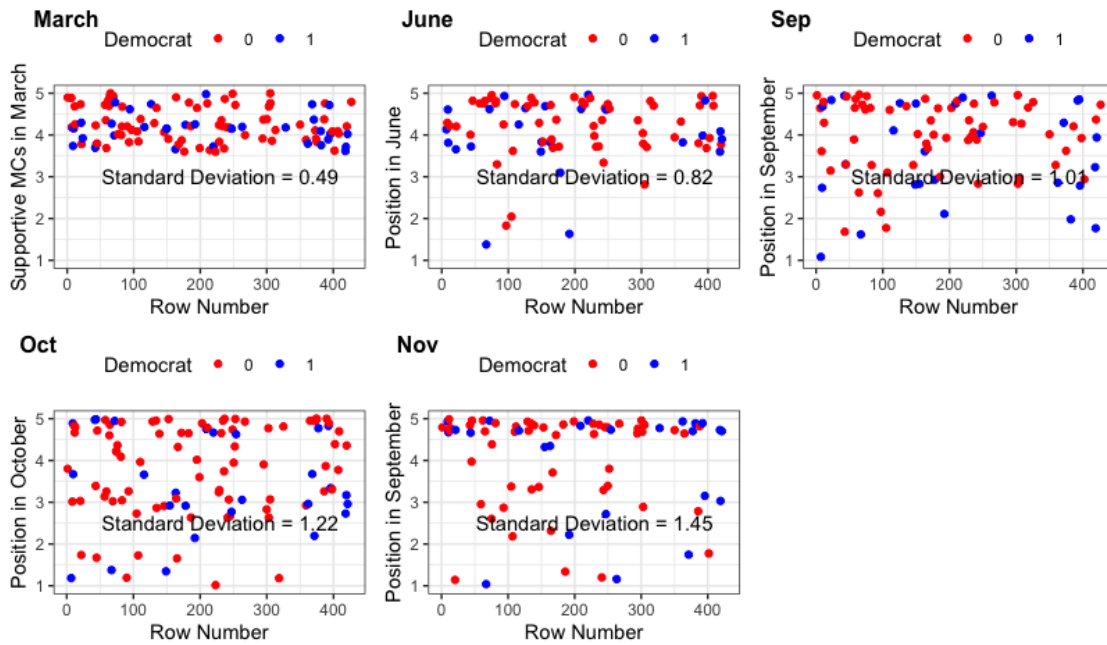
Figure 3 Change in Support Among Early Supporters (MCs leaning in favor, or supportive as of March 1993)
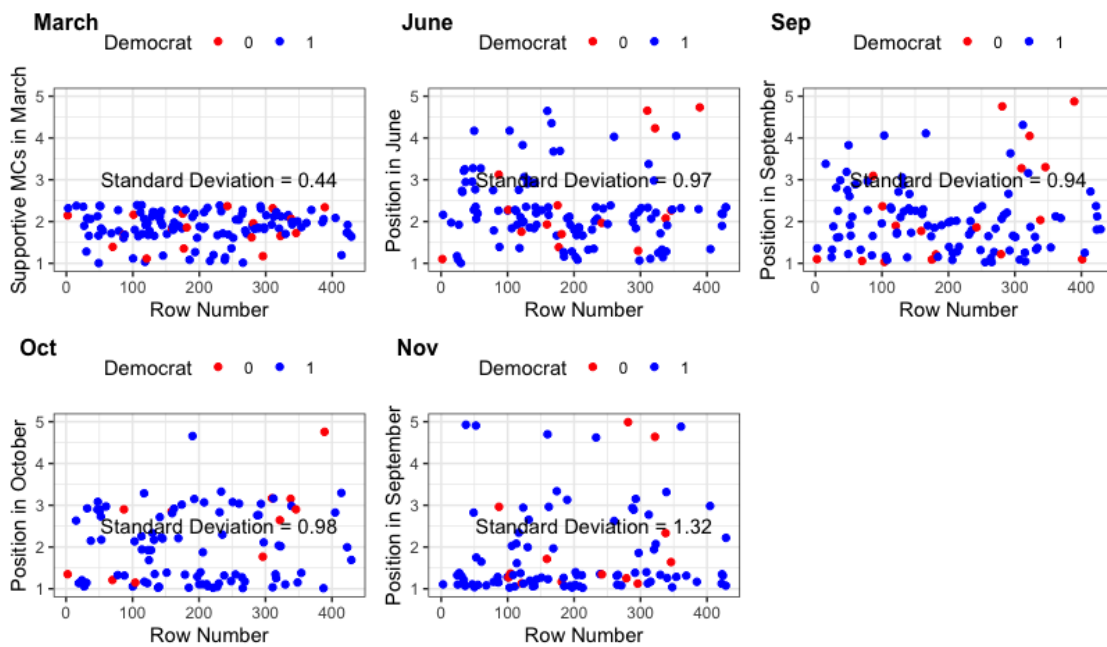
Figure 4 Change in Support Among Early Opponents (MCs leaning against, or oppose as of March 1993)
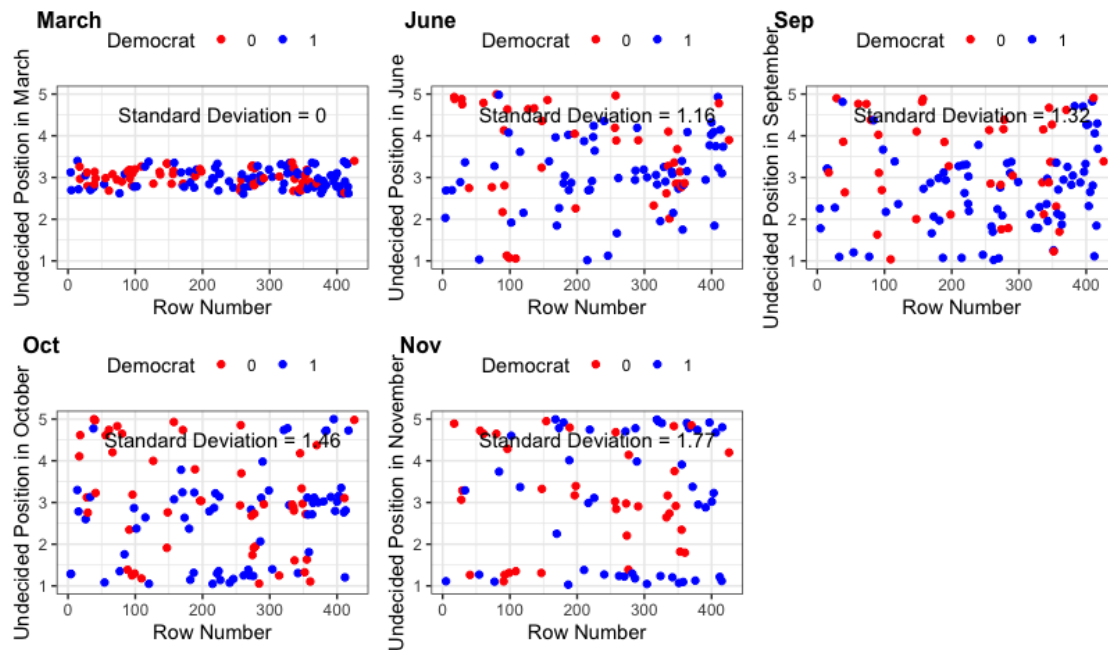
Figure 5 Change in Support Among Undecided Legislators (as of March 1993)

Table 1 Legislator Concerns and Constituency Characteristics

	Sugar	Agriculture	Labor	Jobs
	(1)	(2)	(3)	(4)
Sugar Farms	.071***			
	(.017)			
Agriculture Prop.		8.043***		
		(2.042)		
Median Income			.036	−.031
			(.022)	(.024)
Unemploy. Rate			3.233***	1.292
			(1.235)	(1.321)
Observations	434	434	388	434
Note:			*p<0.1; **p<0.05; ***p<0.01	

there is no evidence for these particular shifts in legislator positioning.

Table 2 Legislator Concerns and Changes in Positioning (Labor and Environment)

	Dependent variable:			
	Change in Legislator Support (Sept to Oct)		Change in Legislator Support (Sept to Nov)	
	All MOCs	Dems Only	All MOCs	Dems Only
Labor or Env. Concerns	0.057	0.023	−0.059	−0.095
	(0.160)	(0.166)	(0.210)	(0.226)
Democrat	0.165*		0.265**	
	(0.093)		(0.122)	
Observations	423	248	423	248

Note: ∗p<0.1; ∗∗p<0.05; ∗∗∗p<0.01

Table 3 Legislator Concerns and Changes in Positioning (Sugar and Agriculture)

	Dependent variable:			
	Change in Legislator Support (Sept to Nov)		Change in Legislator Support (Oct to Nov)	
	All MOCs	Dems Only	All MOCs	Dems Only
Sugar or Agr. Concerns	−0.065	0.048	−0.057	−0.106
	(0.278)	(0.411)	(0.210)	(0.316)
Democrat	0.257**		0.098	
	(0.121)		(0.092)	
Observations	434	258	434	258

Note: ∗p<0.1; ∗∗p<0.05; ∗∗∗p<0.01

Main Results

We now turn to examining whether changes in constituency opinion yield corresponding shifts in positioning by legislators. In Table 4, 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.

Figure 6 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

Table 4 Constituency Opinion and Legislator Positioning

	Change in Legislator Positioning
Change in Overall Support	−.001
	(.006)
Observations	1,637
Note:	*p<0.1; **p<0.05; ***p<0.01

by one level (e.g., uncommitted to leaning favor). Most notably, the lower-left plot (September to October) shows that there is a 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.
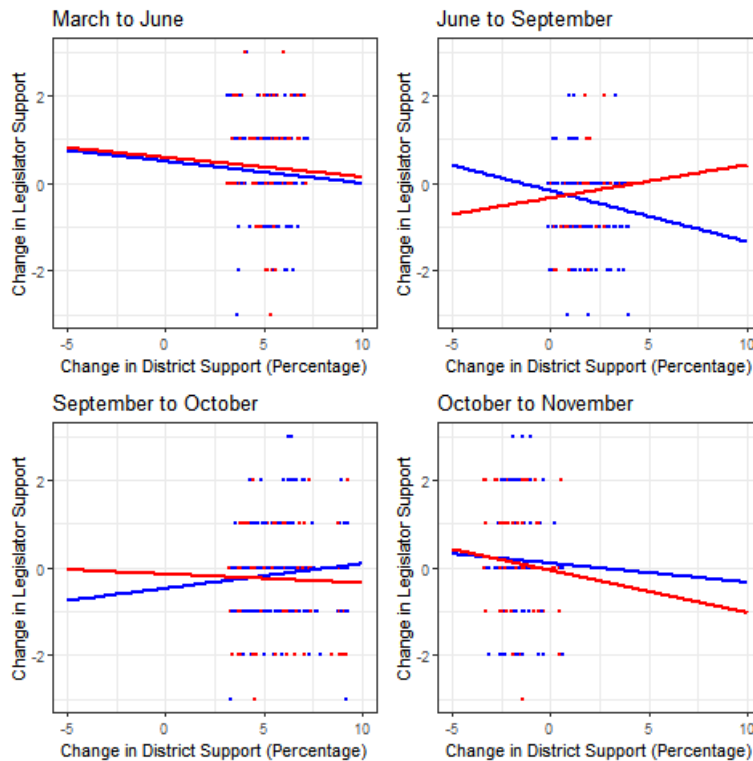

Figure 6 *Change in Overall Constituency Opinion and Change in Legislator Support* (Blue: Democrats, Red: Republicans)

The null results may be driven by legislators with strong priors on NAFTA. Legislators with invested interests in NAFTA may have weak incentives to change their policy position due to public opinion in their districts. Instead, they are likely to form their policy positions in close consultation with local interest groups. In line with this reasoning, only three out of thirty-nine members who said they were strongly opposed to NAFTA in March ended up supporting the NAFTA bill in November. Similarly, only four out of fifty-three strong supporters of NAFTA changed their position at the final vote in November since March 1993. In contrast, legislators with weak or no priors on NAFTA may still be responsive to public opinion. Our data indicates that the legislators with weak or no priors were more likely to change their positions on NAFTA. Specifically, approximately 27% of the members leaning against NAFTA in March ended up supporting the bill eight months later; 21% of the legislators who were favorable in March shifted their stance and opposed the bill. Unsurprisingly, those who were undecided in March were evenly split in November: approximately 59% of the undecideds supported NAFTA at the final vote and 41% opposed it. Those legislators may take public opinion more seriously because there are few dominant interest groups that may win or lose from the trade agreement. If this reasoning is valid, public opinion may shape legislative positions only when legislators have weak priors on the policy at hand.

To test this possibility, we subset our sample into legislators undecided on NAFTA (weak priors) and those who were either in favor of or leaning against NAFTA (strong priors) based on the legislative survey in March 1993. Among the legislators with strong priors on NAFTA, we split the data set into those with favorable and unfavorable priors on NAFTA. We then examine whether legislators with prior positions on NAFTA respond to shifting public opinion. Table 5 and Table 6 report the results. *Change in Overall Support* is not associated with shifts in legislative position.

What about legislators with weak priors on NAFTA? Figure 5 shows how the legislators without a position in March since changed their stances. Because the legislators had to choose a side at the final votes on November 17, we observe movements to 5 (support) or 1 (against) as they got closer to November. If dynamic responsiveness was at play, we should expect the undecided legislators to be swayed by shifting public opinion. Contrary to the theoretical expectation, *Change*

20

Table 5 Constituency Opinion and Legislator Positioning (Initial Supporters Only)

	Change in Legislator Positioning
Change in Overall Support	−.002
	(.011)
Period Fixed Effects	Yes
Observations	502
Note:	*p<0.1; **p<0.05; ***p<0.01

Table 6 Constituency Opinion and Legislator Positioning (Initial Opponents Only)

	Change in Legislator Positioning
Change in Overall Support	−.001
	(.010)
Period Fixed Effects	Yes
Observations	582
Note:	*p<0.1; **p<0.05; ***p<0.01

in Overall Support is in no way correlated with change in positioning in this group of legislators (See Table 7). Figure 7 further supports the null findings. It illustrates the degrees to which public opinion and legislative positions varied from March to November, grouped by legislators' initial priors as of March, 1993. We measure variability by the absolute values of change in public or legislative support. Therefore, a greater value indicates change in opinion or legislative stance regardless of its direction. If dynamic responsiveness was at play among legislators with weak or no priors on NAFTA, we should observe a positive association in this plot, especially among the undecideds. Contrary to this expectation, there is little evidence of a coherent relationship between public opinion and legislative positioning even among the legislators with weak priors. All told, there is little evidence that legislators dynamically adjust their policy attitudes according to shifting opinion in their districts.

Table 7 Constituency Opinion and Legislator Positioning (Undecided Legislators Only)

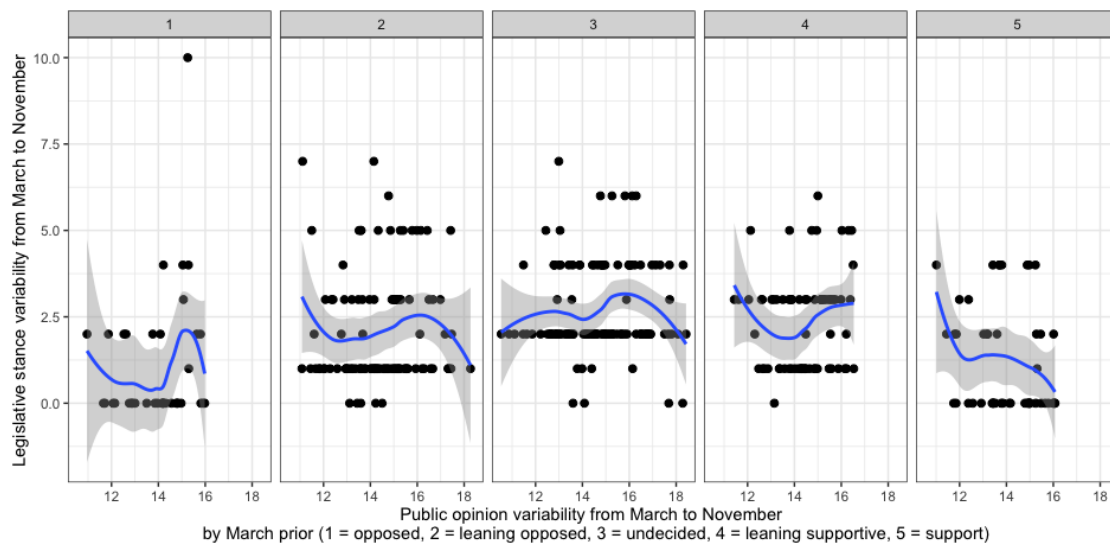|	Change in Legislator Positioning
Change in Overall Support	−.0003
	(.012)
Period Fixed Effects	Yes
Observations	530
Note:	*p<0.1; **p<0.05; ***p<0.01

Figure 7 Variability of Public Opinion and Legislative Positioning from March to November, 1993 by Members' Initial Priors on NAFTA

Robustness Checks

Accounting for Members' Policy Concerns

Because previous studies on dynamic responsiveness have largely relied on final roll-call vote results, it has been difficult to identify whether legislative adaptation is a function of shifting public opinion or policy change. This is an important challenge because the executive frequently changes the contents of policy to broaden legislative coalitions. We resolve this issue by directly controlling for legislators' policy concerns on NAFTA. This strategy allows us to gauge legislators' propensities to change their positions on NAFTA due to specific policy concessions from the executive.

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 sugar and other agricultural products with Mexico. Because labor and environmental groups had strong ties to the Democratic party, the Clinton administration hoped the labor and environmental side agreements would sway public opinion, especially among Democrats, on NAFTA.

The USA*NAFTA surveys allow us to control for these specific policy concerns on labor 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 Washington, Al Swift (D-2), Jolene Unsoeld (D-3), Norman Dicks (D-6), and Mike Kreidler (D-9), listed "labor and environment" 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 and the environment in September, we can control for whether legislators' concerns on these issues were addressed by the side agreements and thus change the relationship between constituency opinion and legislative positioning. We find no evidence that controlling for these policy concerns shifts the relationship between opinion and positioning in either period (See Table A8 and Table A9 in the Appendix).

23

Longer Time Span

One potential critique of our approach taken in the paper is that we might not expect legislators to change their positions in response to monthly fluctuations in public opinion. Rather, it is more likely that legislators "move" with their district over a longer stretch of time. To examine this, we regress changes in legislator positioning between March and November on changes in district opinion in the same time period. While this is still only measuring responsiveness within an 8-month window, this helps us to gauge whether expanding the time span leads to any more evidence of responsiveness than before.

Table 8 Constituency Opinion and Legislator Positioning (Only March and November)

	Change in Legislator Positioning
Change in Overall Support	$-.004$
	$(.026)$
Period Fixed Effects	Yes
Observations	426

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

In Table 8, the results are shown. Here, we can see that substantively, the main result from earlier remains unchanged. We still see little evidence of responsiveness to public opinion, even across a longer spectrum of time. In fact, the relevant coefficient is smaller than in our original analysis, though the standard error is higher given the smaller sample size.

Changes in the District Median

Another critique of our approach is that not all changes in constituency opinion are necessarily politically meaningful. For instance, a change in district opinion from 10 percent in support of NAFTA to 20 percent support may not necessarily yield a change in the legislator positioning of the incumbent, since district median's preferences have not changed. As such, in this section, we regress changes in legislator positioning on changes in the district median over time. Here, the key independent variable—change in the support of the district median—can take on the following

values: -1 (1), which means the median previously supports (opposes) NAFTA but now opposes (supports), and 0, which denotes no change in the median voter's preferences.

As one can see in Table 9, the results remain substantively similar when taking into account changes in the district median, as opposed to changes in constituency support more generally.

Table 9 District Median and Legislator Positioning

	Change in Legislator Positioning
Change in Median Support	$-.002$
	(.070)
Observations	1,637
Note:	*p<0.1; **p<0.05; ***p<0.01

Evidence of Interest Group Influence

Our analysis does not find strong evidence of legislator adaptation to shifting constituency opinion. If legislators are not adapting their positions in response to shifting constituency opinion, what factors are driving changes in legislator positioning?

Qualitative evidence indicates that interest groups and vocal minorities might have played a more important role, along with targeted district benefits, in legislative adaptation than party pressure and public opinion. Especially closer to the final vote, we find 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. 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.

To assess this possibility, we examine whether there is evidence of last-minute changes of legislators to the shifting positions of key agriculture groups, many of which shifted their positions on NAFTA only a few days before the final roll-call vote in the House. For example, in response to new concessions from the Clinton administration, the Florida Citrus Mutual withdrew their opposition to NAFTA on November 10th, and the Florida Fruit and Vegetable Association withdrew their opposition to the agreement on November 11th.[6] Similarly, the National Association of Wheat Growers announced their support for NAFTA less than 36 hours before the House vote.[7]

There is ample qualitative evidence supporting the power of interest group influence. These last minute shifts by important agricultural groups yielded sudden, corresponding shifts in legislator positioning, especially in Florida.[8] Following the announcement by the National Association of wheat Growers, Lee English Jr. (OK-6) shifted from leaning against the agreement to voting in favor–as did Oklahoma congressman William Brewster (OK-3). Representing an agricultural district in California, Walter Herger (CA-2) reported opposition to NAFTA in the November survey, but voted yes, as did Sam Farr (CA-17).

We systematically examine how such targeted concessions sway legislators during the legislative process. Using Public Citizen's reports on district benefits, Evans (2004) shows that district benefits explain whether House members voted for or against the NAFTA legislation. Public Citizen, an anti-NAFTA public interest group, collected detailed journalistic evidence showing which legislators received pork barrel projects (e.g., the President's support for a member's fundraiser,

---

[6]Concessions to citrus farmers included a promise not to cut tariffs on citrus products by more than 15 percent under the pending Uruguay Round Agreement (that established the WTO) and to prevent other foreign countries' citrus products from receiving special, low duty status under the Generalized System of Preferences (Orden (1996) page 371). Fruit and vegetable producers received similar concessions for limiting competition from foreign imports from other nations. Additionally, the administration promised to fund research to insure commercially viable technologies would be accessible for Florida agriculture, including the funding of the U.S. Horticultural Research Station. The Clinton administration also agreed to purchase more sweet corn and fresh tomatoes for school lunch programs.

[7]This followed the submission of a November 15th letter by President Clinton asking the International Trade Commission to investigate whether Canadian wheat agricultural practices were interfering with U.S. Department of Agriculture wheat support programs.

[8]The four were Bill McCollum (FL-8), Porter Goss from (FL-14), Tom Lewis (FL-16), and Carri Meek (FL-17).

funding for a research center in a member's district) or policy concessions (e.g., a side letter to curb wheat imports from Canada). We complemented the data set based on two Public Citizen reports and journalistic evidence by incorporating *when* a legislator received a concession, if any ("Congress OKs North", 1993; Public Citizen, 1993; Global Trade Watch, 1997; Salka, 1994; Global Trade Watch, 2005). With the information on if and when legislators received concessions from President, we test whether policy concessions better explain shifts in legislative positioning than public opinion. We explain the data collection process in detail in the Appendix.

We considered policy concessions and pork barrel projects to construct the variable, *Targeted Concessions*. First, policy concessions include President's promises to i) provide research funding to the domestic tomato industry, ii) negotiate a 15-year, instead of a 10-year, phase out of American textile quotas in talks underway on the Uruguay Round, iii) to pressure Mexico to reduce tariffs on California wine, and iv) to establish the North American Development Bank to finance pollution cleanup to gain support from the Congressional Hispanic Caucus. The administration also delivered last minute side letters on sugar and winter vegetables to gain support from Louisiana and Florida lawmakers ("Congress OKs North", 1993). In addition, we coded which members gained pork barrel projects with little trade implications for specific industries in exchange for their NAFTA votes. A notable example is President's promise to Jay Kim (R-CA) and Carlos Moorhead (R-CA) to negotiate a prisoner-exchange agreement with Mexico to "move convicted illegal immigrants from US jails to Mexico to reduce prison costs" (Global Trade Watch, 1997). President distributed concessions mostly in October and November, close to the final House votes on November 17. The full list is available in the Appendix.

We regress changes in legislative positioning over time on changes in constituency opinion and targeted concessions over time. The coefficient on *Targeted Concessions* in Table 10 indicates that pork barrel projects and concessions for interest groups are positively associated with shifts in legislative positioning ($p < 0.01$). The result is significant controlling for shifts in constituency opinion in member districts. We conducted several robustness checks. We analyzed the final roll call votes controlling for members' initial priors on NAFTA, thus treating members' change in

position at the final votes since March as an outcome variable. The results in Table A13 in the Appendix show that targeted policy concessions best explain NAFTA votes, along with members' partisanship. On the contrary, we found little evidence to conclude that constituency opinion affected members' final decisions.

Table 10 Constituency Opinion, Targeted Benefits, and Legislator Positioning

	Change in Legislator Positioning
Change in Overall Support	−.016
	(.020)
Targeted Benefits	.161***
	(.062)
Period Fixed Effects	Yes
Observations	1,637
Note:	*p<0.1; **p<0.05; ***p<0.01

Altogether, these findings suggest that legislators do adapt their positioning in response to changing preferences–but not necessarily in response to the changing views of their constituents. Instead, legislators responded to the sudden surge in support for the trade agreement among key agricultural interest groups, promises of pork barrel projects, or policy concessions with little implications for trade.

While it is difficult to determine whether or not our findings could extend to other issue areas, we discuss some features of NAFTA that could point in either direction. 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 adjust their positions on NAFTA in accordance with shifting constituency opinion in this highly salient case, we could potentially infer that incumbent responsiveness is even less likely in other, less-salient trade agreements. However, as we noted before, trade is a more complex area than some other issue areas, and interest groups tend to have overwhelming influence on these kinds of trade agreements. Thus, one might expect more responsiveness on other pieces of legislation and key bills than on NAFTA.

Conclusion

Responsiveness to public opinion is a crucial mechanism by which modern democracy operates. That policymakers represent the interests of their constituencies is the main crux of most democratic political institutions. For this reason, many studies on trade politics have focused on the American public's attitudes toward trade liberalization, leaving unanswered whether and how those public preferences are aggregated into policy outputs. Similarly, studies on dynamic responsiveness in the US Congress have underscored the interaction between the public and legislators. This paper argues that when there are concentrated interest groups in policy space, legislators tend to prioritize the interests of vocal minorities such as businesses and trade associations.

We employed original data to examine the validity of our argument in the context of NAFTA, one of the most consequential trade agreements in American history. Using estimates of constituency opinion, we examined responsiveness to the constituents of members of Congress and found that legislators tend to vote for NAFTA in more supportive districts. We then assessed whether there is evidence for dynamic responsiveness on trade by exploiting unique data on the positioning of legislators on NAFTA at various points in time leading up to the November roll-call vote. We also came up with original estimates of constituency level preferences on NAFTA at various 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 found no evidence of dynamic responsiveness to the median voter on an important piece of trade policy legislation. Moreover, we investigate whether changes in the district median are more influential to changes in legislator positioning than just fluctuations in opinion, and we find a similar result. We also check and see if changes in opinion across the whole year, instead of just monthly changes, are critical to predicting changes in legislator positioning, and we find that they are not. However, we do find some evidence of legislator adaptation to the shifting preferences of key interest groups, such as the last minute shifts of prominent agriculture industry associations.

This paper has important implications for our understanding of the formation of trade policy, a crucial facet of economic policy. Previous studies have paid relatively scant attention to how

29

interest groups may mute legislative responsiveness. Although this paper primarily draws from the single case of NAFTA, it has crucial implications for contemporary economic policymaking in the US. The government failed to gain sufficient support for consequential trade deals in Congress in the past decade. The Obama administration did not have enough support for the Trans-Pacific Partnership (TPP) in Congress, thereby failing to ratify the agreement; the trade deals that the Trump administration negotiated were mostly protectionist; the Biden administration has not yet initiated any comprehensive trade negotiations aside from sectoral agreements.

The inability to build a pro-trade winning coalition is potentially problematic. Trade agreements are an important foreign policy tool to accomplish strategic objectives. The Obama administration viewed the TPP as a policy tool to strengthen its ties to the allies in the Asia Pacific. As double-digit inflation hits the country, many experts, including US treasury secretary Janet Yellen, say that the removal of tariffs can make some difference to inflation (Yellen says inflation, 2021; Hufbauer, Hogan and Wang, 2022). We examined this critical question and showed that members of Congress are often more readily responsive to groups with narrow interests than to constituency opinion. In this way, our finding of little dynamic responsiveness to the constituency contributes to the burgeoning literature on dynamic responsiveness and complements the literature on US trade politics.

References

Amadae, Sonja M and Bruce Bueno de Mesquita. 1999. "The Rochester School: [T]he origins of positive political theory." *Annual Review of Political Science* 2(1):269–295.

Ansolabehere, Stephen and Philip Edward Jones. 2010. "Constituents' responses to congressional roll-call voting." *American Journal of Political Science* 54(3):583–597.

Anzia, Sarah F. 2011. "Election Timing and the Electoral Influence of Interest Groups." *The Journal of Politics* 73(2):412–427.

Arnold, R Douglas. 1990. *The logic of congressional action.* Yale University Press.

Baccini, Leonardo, Andreas Dür and Yoram Z Haftel. 2015. "Imitation and innovation in international governance: The diffusion of trade agreement design." *Trade cooperation: The purpose, design and effects of preferential trade agreements* pp. 167–94.

Bafumi, Joseph and Michael C Herron. 2010. "Leapfrog representation and extremism: A study of American voters and their members in Congress." *American Political Science Review* 104(3):519–542.

Bailey, Michael. 2001. "Quiet influence: The representation of diffuse interests on trade policy, 1983-94." *Legislative Studies Quarterly* pp. 45–80.

Bailey, Michael and David W. Brady. 1998. "Heterogeneity and Representation: The Senate and Free Trade." *American Journal of Political Science* 42(2):524–544.

Bartels, Larry M. 1991. "Constituency opinion and congressional policy making: The Reagan defense buildup." *American Political Science Review* 85(2):457–474.

Bastiaens, Ida and Evgeny Postnikov. 2017. "Greening up: The effects of environmental standards in EU and US trade agreements." *Environmental Politics* 26(5):847–869.

Bearce, David H and Samantha L Moya. 2020. "Why is the Mass Public Not More Supportive of Free Trade? Evidence from the United States." *International Studies Quarterly* 64(2):380–391.

Berinsky, Adam J. 2007. "Assuming the costs of war: Events, elites, and American public support for military conflict." *The Journal of Politics* 69(4):975–997.

Betz, Timm and Amy Pond. 2019. "The Absence of Consumer Interests in Trade Policy." *The*

Journal of Politics 81(2):585–600.

Bonica, Adam and Gary W. Cox. 2018. "Ideological extremists in the U.S. Congress: Out of step but still in office." *Quarterly Journal of Political Science* 13(2):207–236.

Canes-Wrone, Brandice. 2015. "From Mass Preferences to Policy." *Annual Review of Political Science* 18(1):147–165.

Canes-Wrone, Brandice, David W. Brady and John F. Cogan. 2002. "Out of step, out of office: Electoral accountability and House members' voting." *American Political Science Review* 96(1):127–140.

Carmines, Edward G and James A Stimson. 1980. "The two faces of issue voting." *The American Political Science Review* pp. 78–91.

Caughey, Devin and Christopher Warshaw. 2018. "Policy preferences and policy change: Dynamic responsiveness in the American states, 1936–2014." *American Political Science Review* 112(2):249–266.

"Congress OKs North". 1993. "Congress OKs North American Trade Pact." *CQ Almanac* 49:171–79.

   URL: *http://library.cqpress.com/cqalmanac/cqal93-1105315*

Dennis, Christopher, Benjamin Bishin and Politimy Nicolaou. 2000. "Constituent diversity and congress: the case of NAFTA." *The Journal of Socio-Economics* 29(4):349–360.

Ehrlich, Sean D. 2008. "The tariff and the lobbyist: political institutions, interest group politics, and US trade policy." *International Studies Quarterly* 52(2):427–445.

Erikson, Robert S., Gerald C. Wright and John P. McIver. 1993. *Statehouse democracy: public opinion and policy in the American states*. Cambridge ; New York: Cambridge University Press.

Erikson, Robert S, Michael B MacKuen and James A Stimson. 2002. *The Macro Polity*. Cambridge University Press.

Evans, Diana. 2004. *Greasing the wheels: Using pork barrel projects to build majority coalitions in Congress*. Cambridge University Press.

Feigenbaum, James J and Andrew B Hall. 2015. "How legislators respond to localized economic

shocks: evidence from Chinese import competition." *The Journal of Politics* 77(4):1012–1030.

Fordham, Benjamin O and Timothy J McKeown. 2003. "Selection and influence: Interest groups and congressional voting on trade policy." *International Organization* 57(3):519–549.

Fowler, James. 2005. "Dynamic Responsiveness in the U.S. Senate." *American Journal of Political Science* 49(2):299–312.

Gelman, Andrew, Jeffrey Lax, Justin Phillips, Jonah Gabry and Robert Trangucci. 2018. "Using Multilevel Regression and Poststratification to Estimate Dynamic Public Opinion?" *Working Paper* .

   URL: *http://www.stat.columbia.edu/ gelman/research/unpublished/MRT(1).pdf*

Gilens, Martin. 2012. *Affluence and influence: Economic inequality and political power in America*. Princeton University Press.

Global Trade Watch. 1997. "Deals for NAFTA votes: Trick, No Treat." *Public Citizen* .

Global Trade Watch. 2005. "Trade Wars: Return of the Myth Votes for Trade Deals Gone Bad, Terms and Outcomes of Past Trade Deals, 1992-2004." *Public Citizen* .

   URL: *https://www.citizen.org/article/trade-wars-revenge-of-the-myth-deals-for-trade-votes-gone-bad/*

Grossman, Gene M and Elhanan Helpman. 2002. *Interest groups and trade policy*. Princeton University Press.

Guisinger, Alexandra. 2009. "Determining trade policy: Do voters hold politicians accountable?" *International Organization* 63(3):533–557.

Guisinger, Alexandra. 2017. *American opinion on trade: Preferences without politics*. Oxford University Press.

Holian, David B., Timothy B. Krebs and Michael H. Walsh. 1997. "Constituency Opinion, Ross Perot, and Roll-Call Behavior in the U. S. House: The Case of the NAFTA." *Legislative Studies Quarterly* 22(3):369–392.

Horn, Henrik, Petros C Mavroidis and André Sapir. 2010. "Beyond the WTO? An anatomy of EU and US preferential trade agreements." *The World Economy* 33(11):1565–1588.

Hufbauer, Gary Clyde, Megan Hogan and Yilin Wang. 2022. "For inflation relief, the United States should look to trade liberalization." *Peterson Institute for International Economics* .

Kahane, Leo H. 1996. "Congressional Voting Patterns on NAFTA." *American Journal of Economics and Sociology* 55(4):395–409.

Kastellec, Jonathan P, Jeffrey R Lax, Michael Malecki and Justin H Phillips. 2015. "Polarizing the electoral connection: Partisan representation in Supreme Court confirmation politics." *The Journal of Politics* 77(3):787–804.

Kim, In Song. 2017. "Political cleavages within industry: Firm-level lobbying for trade liberalization." *The American Political Science Review* 111(1):1.

Kono, Daniel Y. 2006. "Optimal obfuscation: Democracy and trade policy transparency." *American Political Science Review* pp. 369–384.

Krimmel, Katherine, Jeffrey R. Lax and Justin H. Phillips. 2016. "Gay Rights in Congress." *Public Opinion Quarterly* 80(4):888 – 913.

Lax, Jeffrey R. and Justin H. Phillips. 2009*a*. "Gay Rights in the States: Public Opinion and Policy Responsiveness." *American Political Science Review* 103(3):367–386.

Lax, Jeffrey R and Justin H Phillips. 2009*b*. "Gay rights in the states: Public opinion and policy responsiveness." *American Political Science Review* 103(3):367–386.

Lax, Jeffrey R and Justin H Phillips. 2012. "The democratic deficit in the states." *American Journal of Political Science* 56(1):148–166.

Lax, Jeffrey R., Justin H. Phillips and Adam Zelizer. 2019. "The Party or the Purse? Unequal Representation in the US Senate." *American Political Science Review* p. 1–24.

League of Conservation Voters. 1994. "National Environmental Scorecard.".

URL: *https://scorecard.lcv.org/scorecard/archive*

Lee, Boram. 2021. "Environmental issue linkage as an electoral advantage: the case of NAFTA." *Review of International Political Economy* pp. 1–28.

Lee, David S, Enrico Moretti and Matthew J Butler. 2004. "Do voters affect or elect policies? Evidence from the U.S. House." *The Quarterly Journal of Economics* 119(3):807–859.

Lewis, Charles. 1993. "The NAFTA-Math." *The Washington Post* .

URL: *https://www.washingtonpost.com/archive/opinions/1993/12/26/the-nafta-math/87203de3-d777-49c4-8de7-360b932551da/*

McCarty, Nolan, Keith T. Poole and Howard Rosenthal. 2009. "Does gerrymandering cause polarization?" *American Journal of Political Science* 53(3):666–680.

Milner, Helen V and Dustin Tingley. 2015. *Sailing the Water's Edge: The Domestic Politics of American Foreign Policy*. Princeton University Press.

Morin, Jean-Frédéric, Andreas Dür and Lisa Lechner. 2018. "Mapping the trade and environment nexus: Insights from a new data set." *Global Environmental Politics* 18(1):122–139.

Orden, David. 1996. Agricultural Interest Groups and the North American Free Trade Agreement. In *The political economy of American trade policy*. University of Chicago Press pp. 335–384.

Osgood, Iain. 2017. "The Breakdown of IndusTrIal opposITIon To Trade firms, product Variety, and reciprocal liberalization." *World Politics* 69:184.

Owen, Erica. 2017. "Exposure to offshoring and the politics of trade liberalization: Debate and votes on free trade agreements in the U.S. House of Representatives, 2001–2006." *International Studies Quarterly* 61(2):297–311.

Pacheco, Julianna. 2013. "The thermostatic model of responsiveness in the American states." *State Politics & Policy Quarterly* 13(3):306–332.

Postnikov, Evgeny and Ida Bastiaens. 2014. "Does dialogue work? The effectiveness of labor standards in EU preferential trade agreements." *Journal of European public policy* 21(6):923–940.

Public Citizen. 1993. "NAFTA's Bizarre Bazaar.".

Rho, Sungmin and Michael Tomz. 2017. "Why don't trade preferences reflect economic self-interest?" *International Organization* 71(S1):S85–S108.

Salka, Alison Felter. 1994. "Pork, Policy, and Privilege: Presidential Lobbying for NAFTA." *Theses, and Masters Projects. Paper 1539625908.* .

URL: *https://dx.doi.org/doi:10.21220/s2-98bj-r426*

Stimson, James A, Michael B MacKuen and Robert S Erikson. 1995*a*. "Dynamic representation." *American Political Science Review* 89(3):543–565.

Stimson, James A., Michael B. Mackuen and Robert S. Erikson. 1995*b*. "Dynamic Representation." *The American Political Science Review* 89(3):543–565.

Tausanovitch, Chris and Christopher Warshaw. 2013. "Measuring Constituent Policy Preferences in Congress, State Legislatures, and Cities." *The Journal of Politics* 75(2):330–342.

Trounstine, Jessica. 2010. "Representation and Accountability in Cities." *Annual Review of Political Science* 13(1):407–423.

Uslaner, Eric M. 1998. "Let the Chits Fall Where They May? Executive and Constituency Influences on Congressional Voting on NAFTA." *Legislative Studies Quarterly* 23(3):347–371.

Warshaw, Christopher. 2016. "Responsiveness and Election Proximity in the United States Senate." *Working Paper* .

Warshaw, Christopher and Jonathan Rodden. 2012. "How Should We Measure District-Level Public Opinion on Individual Issues?" *The Journal of Politics* 74(1):203–219.

Wink, Kenneth A., C. Don Livingston and James C. Garand. 1996. "Dispositions, Constituencies, and Cross-Pressures: Modeling Roll-Call Voting on the North American Free Trade Agreement in the U. S. House." *Political Research Quarterly* 49(4):749–770.

Yellen says inflation. 2021. ""Yellen says inflation will stay high until Covid is under control"." *Financial Times* .

URL: *https://www.ft.com/content/989024a6-b3ff-4acf-9a16-20a93c255db0*

You, Hye Young. 2017. "Ex post lobbying." *The Journal of Politics* 79(4):1162–1176.

Contents

A   Legislator and Public Opinion Survey Data

In Table A1, 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 A5, we show the surveys of legislators on their positions on NAFTA in 1993.

Table A1 NAFTA Survey Data (1993)

Survey Source	Survey Date	Survey Question	Sample Size
Los Angeles Times	January 14-17	On another subject, as you may know, Mexico and the United States have negotiated a free trade agreement that, if agreed to, will loosen many of the restrictions, laws and controls that now govern commerce between the two countries. Do you favor or oppose the free trade agreement between Mexico and the United States, or haven't you heard enough about the proposal to say?	1,735
Gallup/CNN/USA Today	March 29-31	Some people say that a Free Trade Agreement with Mexico would be good for the United States because it would help the U.S. economy by expanding exports. Others say it would be bad for the U.S. because it will end up costing the U.S. jobs. Do you favor or oppose the Free Trade Agreement with Mexico?	1,000
Yankelovich/Time Magazine/CNN	May 26-27	Do you favor or oppose the free trade agreement between the United States and Mexico that would eliminate all trade barriers between these two countries?	800
Yankelovich/Time Magazine/CNN	June 17-21	(Same as above)	901
CBS News	August 2-3	Do you support or oppose the North American Free Trade Agreement – called NAFTA – with Mexico and Canada that eliminates nearly all restrictions on imports, exports, and business investment between the United States, Mexico, and Canada?	870
Yankelovich/Time Magazine/CNN	September 8-9	(Same as May 26-27 survey)	1,108
NBC News/Wall Street Journal	September 10-13	Do you favor or oppose the North American Free Trade Agreement with Mexico and Canada that eliminates nearly all restrictions on imports, exports, and business investment between the United States, Mexico, and Canada?	1,006
CBS News/NY Times	September 16-19	(Same as August 2-3 survey)	1,136
ABC News	September 16-19	Do you think Congress should approve or reject the trade agreement between the United States, Canada, and Mexico known as the North American Free Trade Agreement or NAFTA?	1,006
Times Mirror	September 24-27	Do you favor or oppose NAFTA, the free trade agreement between the U.S., Mexico, and Canada?	1,529
Los Angeles Times	September 25-28	(Same as January 14-17 survey)	1,491
Gallup/CNN/USA Today	November 2-4	Do you favor or oppose the proposed free trade agreement between the United States and Mexico?	1,003
Yankelovich/Time Magazine/CNN	November 11	(Same as May 26-27 survey)	500
CBS News/NY Times	November 11-14	(Same as September 16-19)	1,334
	Total:		15,419

Table A2 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)

As we note earlier, there might be concerns about the public opinion surveys. In particular, some survey questions mention Canada as one of the trading partners, whereas others do not. We speculate that this might be attributable to the fact that there were existing trade agreements that involved Canada; as such, NAFTA was novel in that it included Mexico in addition to Canada. Nevertheless, we want to measure whether inclusion of "Canada" in the survey question affected policy preferences on NAFTA. In Table A3, we provide some evidence that it does not, using a multi-level regression that controls for individual-level and geographic-level characteristics, in addition to the month of the survey. The results are similar when excluding these covariates, except when the month or other time-related variables are excluded (this is likely because some of the surveys including mentions of Canada were concentrated later in the year, as public opinion increased). In addition, we separately measure public opinion *only* using the surveys that omit any mention of Canada from the survey question. The results, using these surveys, are in Table A4.

Table A3 Opinion on NAFTA

	Dependent variable:
	Vote in Favor
Canada	0.011 (0.051)
Observations	10,310
Covariates Included	Yes

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

Moreover, it would be interesting to know the distribution of "Don't Know" responses across surveys, across time. The proportion of DK responses was highest in January, which makes sense,

Table A4 Main Results (using surveys that exclude Canada)

	Change in Legislator Positioning
Change in Overall Support	−.001
	(.006)
Observations	1,637

given that there was not as much media coverage surrounding NAFTA as there was later on. The percentage then slopes down, from March until late August/early September. Then the percentage trends up during September and hits a low point of around 15-20 percent in November, the same month as the final roll-call vote.

Table A5 "Don't Know" Responses Across Surveys (1993)

Survey	Percentage DK Responses
Los Angeles Times (January)	51.18%
Gallup/CNN/USA Today (March)	5.87%
Yankelovich/Time Magazine/CNN (May)	20.08%
Yankelovich/Time Magazine/CNN (June)	17.41%
CBS News (August)	16.79%
Yankelovich/Time Magazine/CNN (Sept)	15.02%
NBC News/WSJ (Sept)	38.74%
CBS News/NY Times (Sept)	25.05%
ABC News (Sept)	24.32%
Times Mirror (Sept)	32.10%
Los Angeles Times (Sept)	41.92%
Gallup/CNN/USA Today (Nov)	13.54%
Yankelovich/Time Magazine/CNN (Nov)	17.31%
CBS News/NY Times (Nov)	21.71%

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.[9]

As a validity check, we examine four other major trade bills considered in the U.S. House. These bills include the Uruguay Round Agreements Act that established the World Trade Organization (WTO), H.R.4444 that normalized trade relations between the U.S. and the People's Republic of China, the Central American Free Trade Agreement (CAFTA), and the U.S.-Korea Free Trade Agreement.

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. In a later section,

---

[9]This data comes from American FactFinder. Factfinder includes data on breakdowns of race, education, and gender by district for those over the age of 25, which is useful for post-stratification. Using these data is consistent with past research that estimates constituency opinion at the district level (Tausanovitch and Warshaw, 2013; Warshaw and Rodden, 2012). While it introduces some error into the estimates, only a small percentage of the population falls in the remaining age category, and the demographic characteristics are similar between the age groups.

we provide some validity checks and show three results: (1) if one uses CCES survey data on Korea and CAFTA that do contain district-level indicators and compare the cross-level estimates to "normal" estimates that utilize district-level predictors in the multi-level modeling stage, the correlations between the two sets of estimates are very high ($r > 0.9$); (2) if one looks at the Senate legislator positioning data (for which we have access to two months - June and September), then the results are substantively the same; and (3) if one measures the cross-sectional relationship between the monthly constituency opinion estimates and legislator positioning in the corresponding month, we obtain a strong positive relationship, indicating that we are picking up on meaningful variation across constituencies.

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:

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

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 state intercepts are modeled as a function of state-level predictors:

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

---

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

To clarify, the variance of the state coefficient is constant across all states. Furthermore, the following individual-level and geographic-level coefficients are modeled as follows:

$$\alpha_k^{race} \sim N(0, \sigma_{race}^2) \qquad \text{for} \quad k = 1, ..., 4$$

$$\alpha_l^{educ} \sim N(0, \sigma_{educ}^2) \qquad \text{for} \quad l = 1, ..., 4$$

$$\alpha_p^{poll} \sim N(0, \sigma_{poll}^2) \qquad \text{for} \quad p \in \mathbb{R}_+$$

$$\alpha_j^{state} \sim N(0, \sigma_{state}^2) \qquad \text{for} \quad j = 1, ..., 51$$

$$\alpha_m^{month} \sim N(0, \sigma_{month}^2) \qquad \text{for} \quad m = 1, ..., 7$$

$$\alpha_r^{month:state} \sim N(0, \sigma_{month:state}^2) \qquad \text{for} \quad r = 1, ..., 357$$

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, and 4 education groups, we have $436 * 2 * 4 * 4 = 13,952$ demographic-geographic types. Using the model estimated above for respondent preferences, we calculated predicted probabilities for each of these $13,952$ 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

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

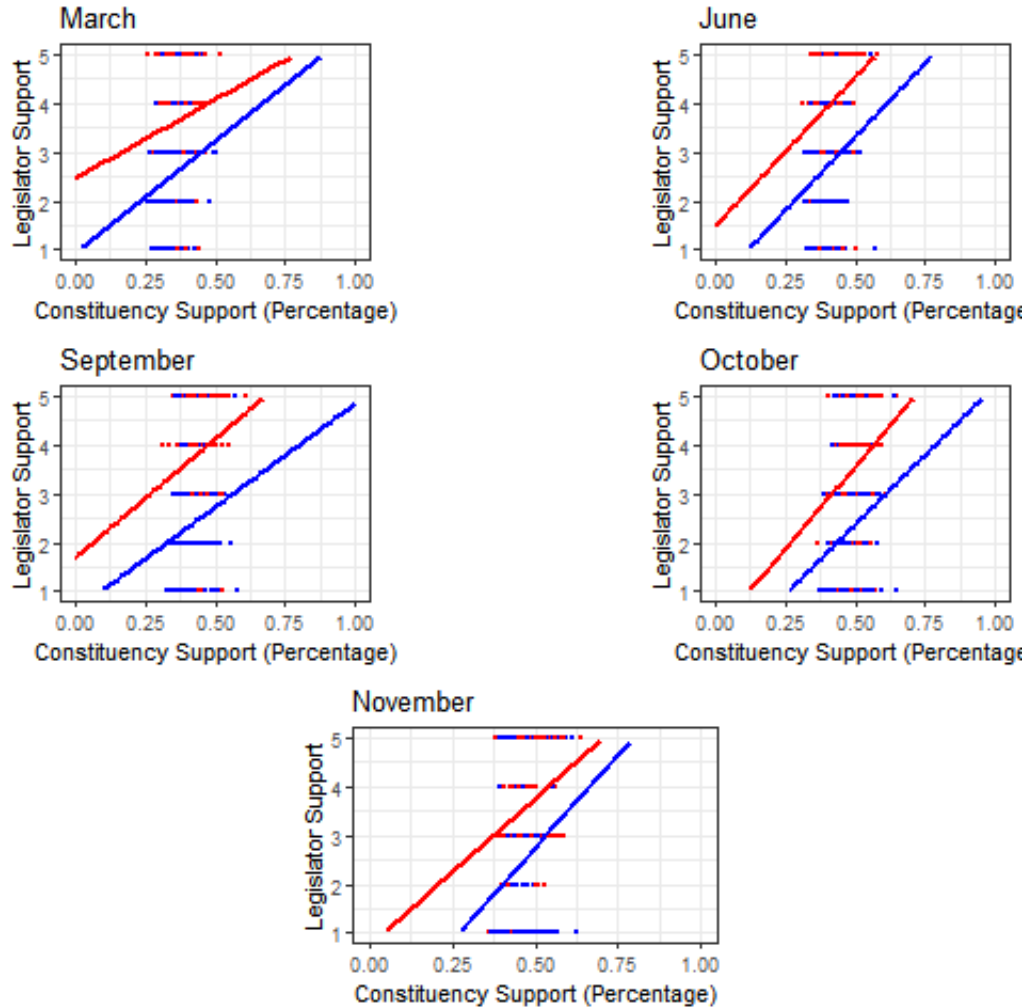[11] For the poll coefficients, we take the average of the intercepts.

Figure C.8 Cross-Sectional Relationship Between Constituency Opinion and Legislator Preferences

C   Validity Tests and Robustness Checks

In this section, we perform some validity tests of the public opinion measures that are employed in the paper. First, we consider the data that we have in the U.S. Senate, which only entails the months of June and September. Note that the cross-level method is not required as we have access to state-level indicators. We use the same set of survey data as we did before and the same regression specification. We find similar results here as we do for the case of the U.S. House, as one can see in Table A6.

Moreover, to test whether cross-level estimates would be substantially different than estimates

Table A6 Constituency Opinion and Legislator Positioning in the Senate

	Dependent variable:
	Change in Legislator Support
Change in Overall Support	−0.002
	(0.009)
Observations	99
Adjusted R^2	−0.008
Note:	*p<0.1; **p<0.05; ***p<0.01
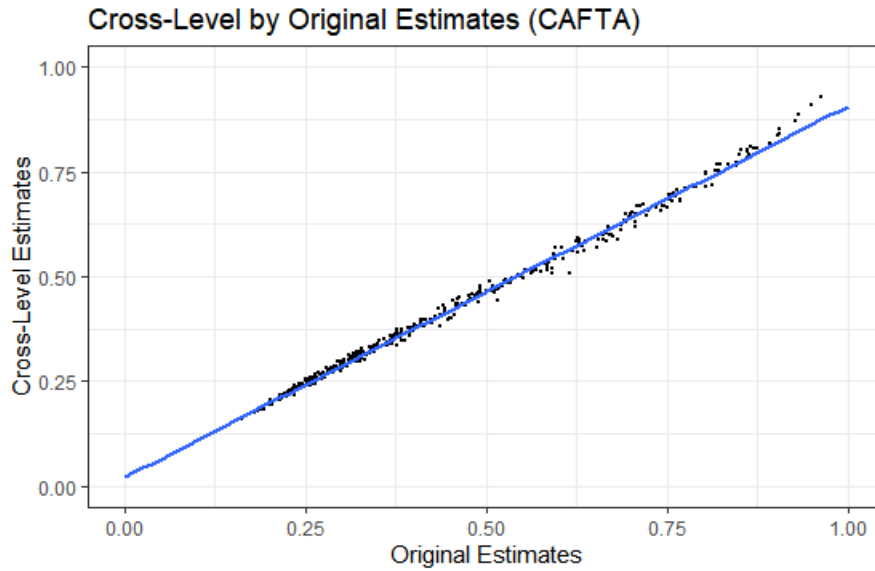
Figure C.9

retrieved by the traditional method, we use CCES survey data on CAFTA in 2005 and the U.S.-Korea trade agreement in 2012 and construct both cross-level and "traditional" MRP estimates. These plotted against each other in Figure C.9 and Figure C.10.

In addition, we provide results that vary the empirical specification adopted in the multi-level regression step in our MRP method. In particular, we show the results with our original specification, running the MRP separately in each time period, removing our linear trend smoother, and adding a time-squared term. The results can be found in Table A7.
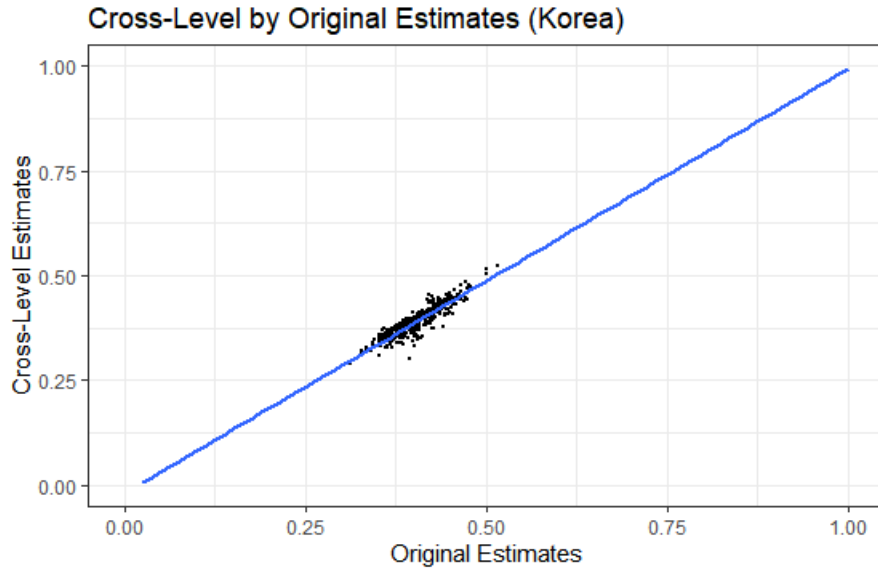
Figure C.10

Table A7 Constituency Opinion and Legislator Positioning

| | Dependent variable: | | | |
| | Change in Legislator Support | | | |
	Original	Separate MRP	No Time Trend	Time Squared
Change in Overall Support	−0.0012	−0.003	−0.005	−0.021
	(0.020)	(0.005)	(0.019)	(0.018)
Period Fixed Effects	Yes	Yes	Yes	Yes
Observations	1,637	1,637	1,637	1,637
Adjusted R^2	0.067	0.067	0.067	0.068

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

Figure C.11 *Distribution of Constituency Opinion*
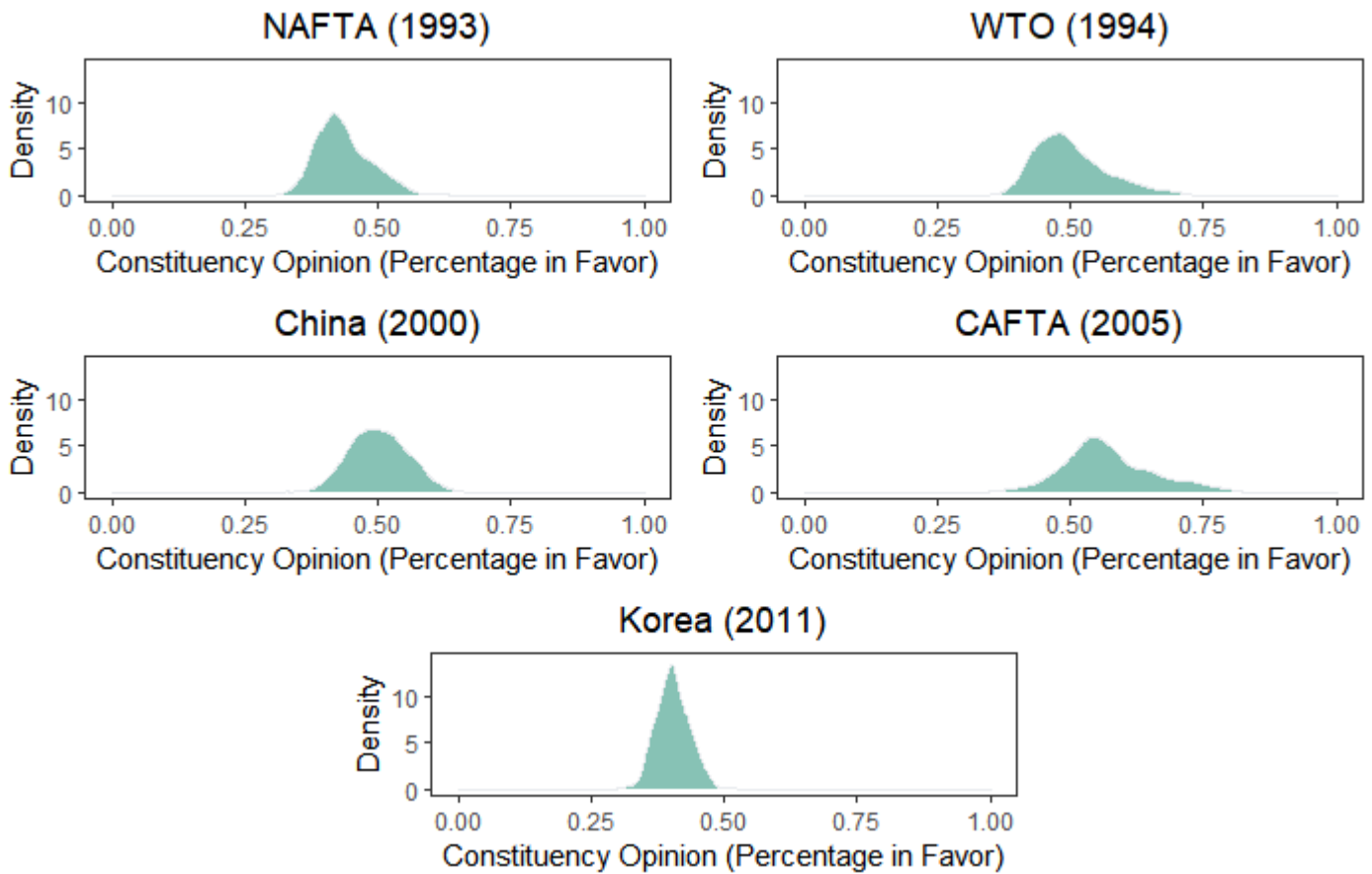
D Policy Concerns Tests

In Table A8 and Table A9, we show our results while controlling for legislator concerns.

Table A8 Legislator Change between June and September (Accounting for Policy Concerns)

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

Table A9 Legislator Change between September and October (Accounting for Policy Concerns)

	Dependent variable:
	Change in Legislator Support
Change in Overall Support	−0.020
	(0.028)
Job Concerns (September)	−0.050
	(0.100)
Environmental Concerns (September)	0.022
	(0.124)
Sugar Concerns (September)	0.014
	(0.210)
Observations	434
Adjusted R^2	−0.008
Note:	*p<0.1; **p<0.05; ***p<0.01

E 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 check 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 A10 Anti-NAFTA Coalition Membership and Attitudes on NAFTA (House members)

	Dependent variable - Support: 1 (Oppose) -5 (Support)		
	March	June	September
	(1)	(2)	(3)
Anti-NAFTA Caucus	−1.474***	−2.335***	−2.065***
	(0.266)	(0.308)	(0.331)
Constant	3.052***	3.388***	3.065***
	(0.059)	(0.068)	(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 A11 Anti-NAFTA Dear Colleagues Letter and Attitudes on NAFTA Among House Democrats

	Dependent variable - Support: 1 (Oppose) -5 (Support)		
	March	June	September
	(1)	(2)	(3)
Democrats' Letter	−0.872***	−1.071***	−0.942***
	(0.131)	(0.170)	(0.174)
Constant	2.731***	3.025***	2.613***
	(0.070)	(0.090)	(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 A12 Pro-NAFTA Dear Colleagues Letter and Attitudes on NAFTA Among House Democrats

	Dependent variable - Support: 1 (Oppose) -5 (Support)		
	March	June	September
	(1)	(2)	(3)
Wyden-Matsui Letter	0.904***	1.278***	1.672***
	(0.158)	(0.200)	(0.188)
Constant	2.321***	2.497***	2.053***
	(0.067)	(0.084)	(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

F   The Effect of Targeted Concessions

Data on Targeted Concessions

Based on Public Citizen's reports and supplemental journalistic evidence, we compiled the data on which House members gained concessions from President in exchange for their NAFTA votes. We identified 32 concessions targeted for at least 132 House members. We then identified approximate dates for the concessions based on Global Trade Watch (1997), Lewis (1993), and Public Citizen (1993). We identified approximate dates for thirty concessions.

It is worth mentioning two cautionary notes. First, the list of concessions presented in this section is by no means exhaustive. Due to the clandestine nature of vote-buying, there might be some concessions that did not receive any public attention. If this is the case, our analysis is likely to present conservative estimates of the effect of concessions. Second, it is difficult to identify exact dates for concessions. Typically, we used the date information on letters from President or relevant agencies to House members to identify concession dates based on Public Citizen (1993). When a dated letter was unavailable, we used the date on which a relevant news article was published,

assuming that the article covered a relatively recent concession. For this analysis, it suffices to determine in which period President made a promise for district benefits because the goal is to test whether House members announced their support for NAFTA during the period they received a concession from President.

1. The energy deal (Nov 13, 1993): *Letter from President Bill Clinton to Edward J. Markey (MA)*

2. The beef, wheat, and peanuts transshipment deal (Nov 16, 1993): *Letter from Commissioner Customs George J. Weiss to Rep. Glenn English*

3. The plutonium project deal (Nov 11, 1993): "Sarpalius to exchange vote for Panhandle research lab." *AP Wire Service*, Avalanche-Journal, Lubbock TX.

4. The shipyard deal (Nov 14, 1993): *Meg Vaillancourt, "Foes See Link in Studds' 'yes', Shipyard Aid," Boston Globe, November 14, 1993.*

5. The manufacturing technology center deal (Nov 12, 1993): Peter Hardin, "Vow came on heels of Payne's decision," *Richmond Times-Dispatch*.

6. The Canadian chemical plant deal (Oct 13, 1993): "USTR Announces FTA Section 409(B) Determination."

7. The community development deal (Nov 16, 1993): "Flake Announces Support for NAFTA after Meeting with President," press release from Rep. Floyd Flake.

8. The fundraiser deal 1 (Nov 15, 1993): Meg Vaillancourt, "Meehan to Reveal NAFTA Stand," *The Boston Globe*.

9. The fundraiser deal 2 (Nov 17, 1993): Kevin Merida and Tom Kenworthy, "For Some a Bitter NAFTA Taste: House Awaits Fallout from Bipartisan Vote Deal-Making," *Washington Post*, November 18, 1993, A11.

10. The fresh-cut flower deal (Oct 26,1993): "Congress OKs North American Trade Pact." In *CQ Almanac* 1993, 49th ed., 171-79. Washington, DC: Congressional Quarterly, 1994.

11. The North American Development Bank deal (Oct 27, 1993): "Congress OKs North American Trade Pact." In *CQ Almanac* 1993, 49th ed., 171-79. Washington, DC: Congressional Quarterly, 1994.

12. Promises made on textiles and apparel (Nov 16, 1993): *Letter from President Bill Clinton to Representative John M. Spratt, Jr.*

13. Methyl Bromide Phaseout (Nov 10, 1993): *Letter from US Trade Representative Mickey Kantor to Michael J. Stuart, Executive Vice President and General Manager of the Florida Fruit and Vegetable Association.*

14. Promises on Peanut Butter and Peanut Paste (Nov 15, 1993): *Letter from President Bill Clinton to Representative Glenn English, November 13, 1997.*

15. Promises Made on Flat Glass (Nov 3, 1993): *Exchange of letters between US Trade Representative Mickey Kantor and Mexican Secretary of Commerce James Serra Puche.*

16. Promises made on wine (Nov 3, 1993): *Exchange of letters between Mickey Kantor, US Trade Representative, and Jaime Serra Puche, Mexican Secretary of Commerce.*

17. Tomato relief (Nov 10, 1993): *Letter from US Trade Representative Mickey Kantor to Michael J. Stuart, Executive Vice President and General Manager of the Florida Fruit and Vegetable Association.*

18. Promises made on durum wheat (Nov 15, 1993): *Letter from President Bill Clinton to Oklahoma Representatives.*

19. Promises made to protect broomcorn brooms (Nov 11, 1993): "Hobson Believes NAFTA will Benefit Local Area and Ohio," press release from Rep. Dave Hobson.

20. Promises made on asparagus (Nov 10, 1993): *Letter from US Trade Representative Mickey Kantor to Representative Peter Hoekstra.*

21. Frozen vegetable country-of-origin labeling (Nov 13, 1993): "Wheeling, Dealing to Assure a Victory," Steve Komarow, *USA Today*, Nov 18, 1993.

22. Protection and Promotion of Labor Rights Outside the Core Text of NAFTA (Oct 30, 1993): "Pelosi Supports NAFTA," *San Francisco Chronicle*, Nov 3, 1993.

23. Extradition of Mexican Rapist (Nov 16, 1993): "Shaw claims judicial victory and will vote for NAFTA," press release.

24. Prisoner Exchange (Nov 16, 1993): Press release issued by Rep. Jay Kim (R-CA).

25. The highway deal (Nov 17, 1993): "Area Lawmakers Did Some Horse-Trading Before Vote," Alan C. Miller, *Los Angeles Times*.

26. The appliance deal (Nov 7, 1993): "President Plays Let's Make a Deal as NAFTA Vote Nears : Trade: Behind door No. 1 is a Maytag tariff. Behind door No. 2, a fruit pact. Clinton haggles, but with limits," James Risen & James Gerstenzang, *Los Angeles Times*.

27. Promise on a research center (Nov 12, 1993): Karen Ball, "White House: Wheeling and Dealing to Sell NAFTA," *Associated Press*.

28. Promise on grazing fees (Nov 12, 1993): Karen Ball, "White House: Wheeling and Dealing to Sell NAFTA," *Associated Press*.

29. Promise on two additional air routes (Nov 12, 1993): Karen Ball, "White House: Wheeling and Dealing to Sell NAFTA," *Associated Press*.

30. The sugar and citrus deals (Nov 3, 1993): "Administration to cut citrus tariffs to gain NAFTA votes..." *Inside US Trade*: 11-44, Nov 5, 1993, page. 13.

Analysis Addressing Targeted Concessions

We analyze the relationship between members' final votes on NAFTA and targeted concessions, controlling for their initial positions on NAFTA in March (variable name: *NAFTA priors*) and public opinion shifts in their districts (variable name: *Average Change in Public Support*). By controlling for members' initial positions in March, we analyze change in members' positioning on NAFTA at the final votes in November since March of 1993. Therefore, *NAFTA priors* is positive associated with members' final votes as expected ($p < 0.01$). *Democrat* is a strong predictor of members' opposition to NAFTA at the final voting stage. We control for *Education*, which measures the proportion of college-educated voters in each district. According to Stolper-Samuelson

theorem, highly skilled workers in a capital-abundant country like the U.S. tend to support trade liberalization. Although *Education* is positively correlated with members' support, the coefficient is not statistically significant. This is because members likely take into account their constituents' preferences in forming their initial priors on a policy like NAFTA. We also include members' previous voting records on environment-related bills (variable name: *Environment*),[12] and campaign contributions from labor groups to measure whether members have any vested interest in these new issues.[13] Altogether, the results show that members tend to support NAFTA especially if they receive policy concessions during the legislative process, even controlling for the standard variables considered crucial in the literature. By contrast, there is little evidence that constituency opinion affects members' final decisions; the coefficients on *Average Change in Public Support* are not significant at any conventional levels.

Table A13 Constituency Opinion, Targeted Benefits, and Final Votes Controlling for NAFTA Priors

	Dependent variable:				
	Final Votes (1 = Support, 0 = Oppose)				
NAFTA priors	1.038***	1.015***	1.013***	0.999***	1.044***
	(0.167)	(0.169)	(0.168)	(0.169)	(0.176)
Democrat	−1.082***	−1.046***	−1.246**	−1.080**	−1.052**
	(0.319)	(0.322)	(0.493)	(0.524)	(0.535)
Average Change in Public Support	0.380	−0.013	−0.164	−0.254	−0.607
	(1.144)	(1.248)	(1.280)	(1.289)	(1.366)
Education		1.608	1.408	1.535	2.324
		(1.955)	(1.992)	(1.993)	(2.106)
Environment			0.004	0.005	0.001
			(0.008)	(0.008)	(0.008)
Labor				−0.047	−0.025
				(0.051)	(0.052)
Targeted Benefits					2.203***
					(0.602)
State Fixed Effects	Yes	Yes	Yes	Yes	Yes
Observations	426	426	425	425	425
Log Likelihood	−176.388	−176.047	−175.900	−175.468	−165.964
Akaike Inf. Crit.	456.776	458.095	459.800	460.937	443.928
Note:					*$p<0.1$; **$p<0.05$; ***$p<0.01$

---

[12] We use the scorecards by members' lifetime scores, which measures members dedication to environmental protection throughout their legislative careers, calculated by the Leagues of Conservation Voters in 1993 (League of Conservation Voters, 1994)

[13] To measure labor groups' contributions, we use the data from OpenSecrets (URL: https://www.opensecrets.org/.)

Public Opinion and Policy Change

If targeted concessions shape legislative positioning, what are the concessions' effect on constituency opinion? Although our previous analysis shows that public opinion does not directly shape legislative decisions on trade, it is plausible that legislators shape their policy position with the intention to gain public support *ex ante*. We conducted additional analyses to examine whether policy concessions affected public opinion. Most policy concessions, including labor, environmental, and agricultural concessions, were finalized in September or October. We therefore analyze whether public opinion in relevant districts shifts as a result of those concessions from September and October. In addition to members' partisan affiliation, we control for whether representatives expressed concerns about NAFTA's negative impact on jobs, agriculture, or the environment; if policy concessions affect public opinion, opinion in those districts is more likely to change once relevant concessions are finalized. Finally, we also include how legislative positioning changed in the previous period from September to October, addressing the possibility that legislative positioning serves as a cue for the public (Berinsky, 2007). We regressed change in overall support from October to November on targeted concessions and controlled for the aforementioned variables. Overall, the results are mixed. First, we use the estimates of public opinion as the outcome variable without adjusting them for measurement errors. Table A14 reports the results. They show that constituency support for NAFTA tended to increase in districts that received targeted benefits. The result from the fully saturated model suggests that districts with agriculture-related concerns were more likely to support NAFTA once concessions were distributed. Next, we conduct the same analysis based on public opinion estimates that adjust for measurement errors. In this analysis, we find little evidence that concessions affect public opinion. As shown in Table A15, the coefficients on *Targeted Benefits* and *Agriculture Concern* are not statistically significant. Given the uncertainty associated with our survey measure, we conclude that there is only weak evidence that public opinion became favorable once concessions are distributed.

Table A14 Constituency Opinion and Legislator Positioning from October to November (Regressions without Bayesian Simulations)

	Dependent variable:		
	Change in Overall Support		
Targeted Benefits	0.124**	0.056	0.055
	(0.053)	(0.061)	(0.061)
Democrat	−0.029	−0.020	−0.022
	(0.076)	(0.080)	(0.081)
Job Concern		0.001	0.001
		(0.086)	(0.086)
Agriculture Concern		0.308**	0.310**
		(0.127)	(0.128)
Environment Concern		0.011	0.011
		(0.104)	(0.104)
Change in Legislative Position			0.008
			(0.040)
Constant	−1.774***	−1.803***	−1.800***
	(0.060)	(0.064)	(0.065)
Observations	434	434	434
Adjusted R^2	0.008	0.015	0.013

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

Table A15 Constituency Opinion and Legislator Positioning from October to November Using 500 Simulations

	Dependent variable:		
	Change in Overall Support		
Targeted Benefits	.0004	−.001	−.0003
	(.012)	(.012)	(.013)
Democrat	−.002	−.002	−.002
	(.019)	(.019)	(.019)
Job Concern		−.001	−.0003
		(.010)	(.010)
Agriculture Concern		.003	.003
		(.021)	(.021)
Environment Concern		.001	.0004
		(.013)	(.012)
Change in Legislative Position			.001
			(.004)
Observations	434	434	434
Adjusted R^2	.007	.004	.011

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