# Who are Responsible and Who are Reprehensible?: Legislative Disconnected Representation on Trade Bills and Presidential Voting

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#### Abstract

This paper argues that legislative votes on trade-related bills have effects on presidential voting. Using ANES and district-level election data, I show that voters who anwsered "increasing trade is bad" tend to more harshly punish incumbent party in presidential election if their representatives cast more pro-trade votes than those whose representatives cast less pro-trade votes. Aggregated district-level election data also show that there is significant relationships between congressional voting on trade bills and presidential voting: disricts whose representatives cast votes corresponding to constituents' economic interests on trade bills show strong punishment on incumbent parties in presidential election.

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### 1 Introduction

Previous studies have long argued that voters often "punish" incumbents for economic shocks, even when they likely play no role in their creation (Achen and Bartels 2004; Bartels 2009; Gasper and Reeves 2011; Healy, Malhotra, and Mo 2010). More recent studies have examined the effects of economic shocks specifically caused by international trade on voting. These studies argue that voters respond to trade-related economic shocks and punish incumbent or incumbent's party in presidential election. The proportion of trade winners and losers in counties (Jensen, Quinn, and Weymouth 2016) and job loss caused by international trade (Margalit 2011) lead to voters' punishment of incumbent's party.

However, these studies assume that voters judge politicians on the bases of their personal well-being (the "pocketbook" voting hypothesis) and do not consider the cases that voters judge political leaders based on national economic conditions (the "sociotropic" voting hypothesis). Thus, they do not provide proper explanations for variations of incumbents' vote shares in districts where trade winners and losers are similarly endowed and among voters who have the same position on trade.

I argue that legislative representation is one of the reasons there are such variations. Voters who are similarly influenced by trade might have different levels of disconents about economic harms they have. I argue that constituents who are not properly represented by their representatives tend to more strongly show their discontents in presidential election. In other words, voters whose interests are properly represented are likely to less punish incumbents. Unlike previous studies examining economic voting on congressional election and presidential election separately, this paper shows that legislative performance can influence voters' decision to punish or reward presidential incumbent.

To explain the mechanism of the linkage between legislative performance and presidential voting, I extend the clarity of responsibility theory. Numerous studies have argued that institutional clarity of responsibility conditions voters' ability to make judgements about who is responsible for policy outcomes, and to sanction incumbents accordingly (Anderson 2000). I argue that shared responsibility of trade policy between the legislative and the executive also affects voters' ability to attribute responsibility between the two branches of government

and to punish either of the branches. Studies on clarity of responsibility have argued that complex institutional or government responsibility tend to show weak accountability, since voters are less able to attribute responsibility to one clear object. However, this paper argues that because responsibility is shared and voters do not exactly attribute responsibility of trade policy to either of the branches, they tend to punish both of them. In other words, one side's of responsibility leads to another side's punishment, and thus overall strength of economic voting could be stronger.

By using both individual-level and aggregate-level data, I examine the effects of representatives' trade roll calls on economic voting in 2016 presidential election. Trade was one of the most salient issues in 2016 presidential election. About 84% of registered voters said that the issue of the economy will be very important to their decision about who to vote for in the 2016 presidential election and about 57% of voters said that trade policy will be.<sup>1</sup> I first analyze survey data to examine how voters who oppose international trade respond to representatives' pro-trade roll calls and whether they more harshly punish incumbent party in presidential election. I also analyze aggregate level data to estimate the effects of representatives' trade roll calls on economic voting in presidential election by controlling ideology, economic, and demographic factors.

From the analysis using individual-level data, I show voters who oppose international trade but whose representatives cast pro-trade roll calls are more likely to punish incumbent party, while voters whose representatives cast anti-trade roll calls are less likely to punish incumbent party. By using aggregate-level data, I also show that districts with similar proportions of trade winners and losers tend to show stronger economic voting as representatives cast more pro-trade roll calls.

In the next section, I provide theoretical perspectives to explain how legislative representation influences economic voting in presidential election. I then explain data and measurement I used in this paper. Next, I present our main empirical findings, showing that pro-trade roll calls play a significant role in voters' economic voting in presidential election. The final section concludes and provides implications of the study.

<sup>&</sup>lt;sup>1</sup>Pew Research Center. 2016. "2016 Campaign: Strong Interest, Widespread Dissatisfaction.", Washington, D.C. (July 7, 2016). Retrieved from http://www.people-press.org/2016/07/07/4-top-voting-issues-in-2016-election/. (accessed June 27, 2016)

### 2 Theoretical Perspective

Existing political economy models explain the effects of international trade on presidential voting focusing on constituents' economic interests. Although it arguably makes countries better off, international trade generates winners and losers among domestic groups (Rogowski 1987). Low-skill workers have been the most vulnerable trade losers, while high-skill workers benefit from open economy (Rogowski 1989; Scheve and Slaughter 2001; Mayda and Rodrik 2005; and Fordham 2008). One of the studies shows that the proportion of trade winners and losers in counties well predict presidential voting (Jensen, Quinn, and Weymouth 2016). Moreover, economic shocks particularly caused by international trade is another important factor for voters to punish incumbent's party (Margalit 2011).

Though they advance our understanding on the effects of international trade on presidential voting, they all have the same assumption: voters punish incumbents based on their self-economic interests ("pocketbook" voters). But the studies do not provide explanations the cases that voters punish incumbents based on national economic conditions ("sociotropic" voters). I try to include all voters who potentially punish incumbents for the poor economic situation caused by trade policy. The previous stidies also do not explain why some trade losers do not punish incumbents and the variations of the strength of economic voting among districts with similarly influenced by trade. I argue that legislative representation plays a moderating factor for voters' economic voting in presidential election. I hypothesize that voters who oppose international trade for their well-being and national economy tend to more punish when their representatives poorly represent their positions. In the next section, I provide theoretical perspectives on the linkage between legislative representation and voters' punishment on presidential incumbent or incumbent party.

### 2.1 Economic Voting and Clarity of Responsibility

A vast literature has showed that voters often "punish" incumbents for economic shocks, even when they likely play no role in their creation (Achen and Bartels 2004; Bartels 2009; Gasper and Reeves 2011; Healy, Malhotra, and Mo 2010). Elections have played a significant role as a sanctioning mechanism for voters to hold politicians accountable. The rationale is quite simple: '[I]f the performance of the incumbent party is satisfactory ... retain the incumbent in office, while if the government's performance is not "satisfactory" ... vote against the incumbent' (Kramer 1971: 134).

The mechanism of retrospective economic voting is that voters who translate their economic well-being into political evalution view their economic situations as dependent on government policies or macroeconomic conditions affected by government policies (Abromowitz, Lanoue, and Ramesh 1988). Voters might blame government policies or performance for their economic situations even if the true cause of the poor economic status comes from personal or other reasons. The key of the meachanism of economic voting, thus, is not where the real cause of the problem comes from, but how voters attribute responsibility.

When assigning responsibility for economic situation, voters sometimes have difficulties in figuring out who has to be most blamed. Numerous studies show that institutional context influences voters' responsibility judgement. Powell and Whitten develop "clarity of responsibility" index and classify 19 democratic nations to show that the higher clarity of responsibility index the country has, the more pronounced the effects of economic conditions on the governing party's vote share changes (Powell and Whitten 1993). Subsequent studies also show that the effects of state unemployment on the incumbent gubernatorial party's vote share are considerably stronger when the governor's party controls both chambers of the state legislature (Leyden and Borrelli 1995); the effects of states' fiscal conditions on electoral support for the governor's party are greatly enhanced following periods of unified government (Lowry, Alt, and Ferree 1998); and economic voting is quite weak on the issues in which responsibility is shared between the legislative and the executive (Rudolph 2003).<sup>2</sup>

<sup>&</sup>lt;sup>2</sup>Hobolt et. al. (2013) separate clarity of responsibility into institutional clarity and government clarity. The former focuses on the formal dispersion of power between the executive, the legislature and different levels of government, while the latter focuses on how cohesive the particular incumbent government is. The authors emphasize the needs to distinguish the two types of clarity of responsibility, since a country can have a low institutional concentration of power, but a highly unified executive.

## 2.2 Shared Responsibility on Trade Policy and the Formation of Responsibility Judgments

Trade policy formation is one of the instances the two branches of government—the legislative and the executive—share responsibility. The U.S. Constitution grants the legislative significant authority to regulate international trade including establishing tariffs, passing trade agreements, and forming other provisions affecting commerce with other countries. Particularly, the House Ways and Means Committee has primary congressional jurisdiction on trade matters. Trade Promotion Authority (TPA), sometimes called "fast track" also shows that free trade agreement reflects decades of debate, cooperation, and compromise between Congress and the executive branch in finding a pragmatic accommodation to the exercise of each branch's respective authorities over trade policy. Since the power to craft trade policy is a shared power, responsibility for trade policy outcomes might legitimately be attributed to both institutions.

Though the previous studies on clarity of responsibility differ in levels of analysis, these studies have the same assumption: countries or issues with more complex institutional or government structure in attributing responsibility tend to show weaker accountability. But, even if complex institutional or government structure weakens voters' ability to figure out who has to be most blamed, voters still have discontents about poor economic situations and thus blame some of relavant actors. In case of trade policy, sharing responsibility between the legislative and the executive possibily leads voters to punish both of them for trade policy outcomes, even if they do not attribute exact amount of responsibility of each branch. Thus, I argue that voters tend to link the relavant actors in the process of economic voting and hold the both accountable, and this contribute to strengthening overall economic voting.

### 3 Empirical Analysis

This section presents the main empirical results of the effects of representatives' trade roll calls on presidential voting. I begin with a description of the data and measurement used for the analysis. I then use individual-level data and present our empirical finding that voters who oppose international trade and live in districts with high unemployment rate are more likely to choose challenger in presidential election as their representative cast one more pro-trade vote. In addition, I examine aggregate-level data and find that districts whose representatives cast more pro-trade roll calls show stronger economic voting in presidential election when their economic, demographic, and ideological factors controlled.

#### 3.1 Trade Roll Calls

To examine the effects of legislative representation on economic voting in presidential election, I use representatives' trade roll calls. Roll call vote plays a significant role as a political tool for representatives to translate constituents' interests into policy. Moreover, Casting roll call vote is an important means of taking positions for legislators (Mayhew 1974). I collect trade-related roll calls in the 113th (2013-2014) and 114th (2015-2016) Congress from Library of Congress based on a list the Cato Institute provides.<sup>3</sup> Table 1 describes trade-related roll call votes used in this paper. I make *Trade Vote* variable to measure representatives' trade positions. The variable indicates the number of pro-trade roll calls a representative casts. The variable is continuous from 0 to 7. If a representative voted for all free trade bills, he or she is given 7. On the other hand, a representative who was against all free trade bills, the score he or she is given is 0. As  $TradeVote_i$  increases, that means  $representative_i$  casts more pro-trade roll calls.

Congress	Bill Name	Required	Result	Free Trade Vote
114	Resurrect the Export-Import Bank	Simple Majority	Р	Ν
114	Lift the Crude Oil Export Ban	Simple Majority	Р	Y
114	Trade Promotion Authority	Simple Majority	Р	Y
114	Trade Preferences Extension Act	Simple Majority	Р	Υ
113	Reform Sugar Program	Simple Majority	$\mathbf{F}$	Y
113	Olive Oil Regulation	Simple Majority	Р	Y
113	Terminate Market Access Program	Simple Majority	$\mathbf{F}$	Y

Table 1: Trade-Related Roll Call Votes in 113th and 114th Congress

<sup>&</sup>lt;sup>3</sup>The Cato Institute website(https://www.cato.org/research/trade-immigration/congress) provides major trade votes since 1999.

#### 3.2 Individual level Analysis

I first examine how voters who oppose international trade respond to representatives' protrade roll calls. I use 2016 American National Election Studies (ANES) to look at how voters who oppose international trade respond to representatives' trade roll calls and vote in presidential election. The data from 2016 ANES have 3,649 respondents. The survey contains questions on respondents' economic status, self-reported partisan identification, race, education, age, and other personal characteristics. The survey also asks respondents how they think about international trade. The survey asks the following question: 11do you think increasing trade with other countries is good or bad?". I use answers for this question as a measurement of respondents' trade position. I show how voters who think that increasing trade is bad respond to representatives' pro-trade roll calls.

Unlike the previous studies focusing on voters who vote based on their personal well-being, I target all voters who punish incumbents for trade policy outcomes. Economic voting is not limited to pocketbook voters who consider only personal economic well-being, but it includes "sociotropic" voters who cast votes on the basis of national economic conditions. I try to include all pocketbook voters and sociotropic voters by using trade position as a way of selecting voters who potentially cast economic voting for trade policy outcomes.

To examine how voters who oppose international trade respond to representatives' protrade roll calls, I model the choice of 2016 presidential candidate of respondent i as a nonlinear function of individual characteristics as follows. The dependent variable is binary: 0 means a vote for Hillary and 1 means a vote for Trump. I control several individual characteristics such as self-reported party id, years of education, race, age, and income.

$$Pr(\text{Vote for Trump}) = \frac{\exp(\alpha_i + \text{Trade Vote}_i \times \gamma + \mathbf{X}_i \boldsymbol{\beta} + \epsilon_i)}{1 + \exp(\alpha_i + \text{Trade Vote}_i \times \gamma + \mathbf{X}_i \boldsymbol{\beta} + \epsilon_i)}$$
(1)

Another model includes the interaction term  $TradeVote_i \times unemployedpcnt_i$ . The interaction term is included in the equation to examine whether voters who oppose trade are more likely to vote for Trump as their districts have higher unemployment rate.

$$Pr(\text{Vote for Trump}) = \frac{\exp(\alpha_i + \text{Trade Vote}_i \times \text{unemployedpcnt}_i \times \gamma + \mathbf{X}_i \boldsymbol{\beta} + \epsilon_i)}{1 + \exp(\alpha_i + \text{Trade Vote}_i \times \text{unemployedpcnt}_i \times \gamma + \mathbf{X}_i \boldsymbol{\beta} + \epsilon_i)} \quad (2)$$

Table 2 presents the results of logistic regression fitting equation 1 on all respondents and on respondents who think that increasing trade is bad. Though the coefficients of *Pro-Trade Vote* are positive, I find no significant relationship between representatives' trade roll calls and presidential voting. Unlike our expectation, even respondents who think that increasing trade is bad do not show higher possibility of voting for Trump when their representatives cast more pro-trade votes.

Voters' response to their representatives' pro-trade roll calls might depends on district's economic situation. For those who live in districts with little economic problems, trade issue is not as much as salient for those who live in economically lagged districts. Hence, we include the interaction term *Pro-Trade Vote*  $\times$  *unemployedpcnt* to the model.

Table 3 shows that the results of logistic regression of Vote for Trump on the interaction  $Pro-Trade Vote \times unemployedpcnt$ , controlling respondents' individual characteristics and representatives' party affiliation. In the first column and the second column, I aggregate representatives' trade roll calls during Obama's second term to examine the effects of protrade roll calls. In the third and the last column, I examine the effects of protrade roll calls by separating trade roll calls into those of the 114th Congress and those of the 113th Congress. The effects of trade votes during the recent two years (114th Congress) are much stronger on presidential voting by unemployment rate than those of trade votes casted during the recent four years (Obama's second term). This might be explained different salience of trade votes of 114th Congress and those of Obama's second term. Voters might be more exposed to representatives' recent trade votes or it's possible that voters put more emphasis on recent trade votes when considering their representatives' trade position.

Regardless of the separation of trade roll calls, all interation terms show strong significance. The results indicate that voters who oppose international trade but whose representatives cast pro-trade roll calls are more likely to vote for Trump as their districts' unemployment rate increases than those whose representatives cast anti-trade votes. In the second and the last column, when adding districts' ideology control, the size of the coefficients of the interaction terms increase. In all columns, I control representatives' party affiliation.<sup>4</sup> In

<sup>&</sup>lt;sup>4</sup>In the U.S. Congress, there has been a partial divide on trade policy: Republican party has been a pro-trade party; while Democratic party has been opposed free trade policy with within-party splits. Hence, legislators' party affiliation and probability of their casting pro-trade roll calls. Voters might respond

	Dependent variable:		
	Vote for Trump (0	): Hillary; 1: Trump)	
	(R: All)	(R: Anti-Trade)	
Pro-Trade Vote			
(114th Congress)	0.082	0.001	
	(-0.324, 0.487)	(-1.100, 1.101)	
Pro-Trade Vote			
(113th Congress)	0.134	-0.280	
	(-0.255, 0.523)	(-1.361, 0.802)	
$PartyIDR^{a}$	5.588***	7.952***	
·	(4.946, 6.231)	(5.384, 10.521)	
log(Education)	-1.063***	-0.417	
0( )	(-1.824, -0.302)	(-3.024, 2.190)	
SpanHisLati	$-0.930^{*}$	-0.049	
-	(-1.918, 0.059)	(-2.479, 2.381)	
$\log(Age)$	1.101***	0.266	
0( 0)	(0.376, 1.825)	(-1.931, 2.463)	
log(Income)	-0.334**	-0.492	
0, ,	(-0.658, -0.011)	(-1.328, 0.345)	
$PartyR^{b}$	0.869*	3.227**	
·	(-0.032, 1.770)	(0.581, 5.873)	
States Fixed	Y	Y	
Observations	1,008	286	
Log Likelihood	-228.692	-43.185	
Akaike Inf. Crit.	569.385	190.370	

Table 2: Effects of Representatives' Pro-Trade Roll Calls on Trump Vote in 2016 Presidential Election by Respondents' Position on Trade

a. Respondents' self-report party identification.

**b.** Representatives' party affiliation.

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

Appendix, I report a plot of the interaction with *Pro-Trade Vote* as a categorical conditioning variable.

Note that Table 3 examines the effects on respondents who think that increasing trade is bad. Those respondents' trade position might be cause by not only their personal economic well being, but also consideration on national economy. While numerous previous political economy models deal with trade losers as voters who punish incumbents for poor economic situation caused by trade, I assume that there are a number of voters who oppose international trade since they consider national economy rather than their own well-being. I also exclude voters who think that increasing trade is good from the analysis. Voters who propose trade respond to representatives' pro-trade votes significantly differently from trade-haters. For those who propose trade, representatives' pro-trade votes are favorable, and they are likely to think that their positions are well represented. On the other hand, trade-haters tend to think that representatives' pro-trade votes are disconnected representation. I show the results of logistic regression of Vote for Trump on the interaction *Pro-Trade Vote* × *unemployedpcnt* with all respondents who propose and oppose trade.

#### 3.3 Aggregate level Analysis

I also analyze aggregate-level data to test representatives' pro-trade roll calls strenghten economic voting in presidential election. I assemble economic, demographic variables at congressional district-level. A vast literature has analyzed economic voting at county-level, but in this paper, I analyze at district level since I focus on the effects of legislative representation

To test whether representatives' trade roll calls have effects on economic voting, I model the support for Trump at district i and within state j as a linear function of district characteristics as follows. The model includes the interaction term  $TradeVote_i \times unemployedpcnt_i$ to estimate the effects of pro-trade roll calls as districts' unemployment rate increases. Unemployment rate is not the best but a suboptimal measurement for the proportion of voters who oppose international trade since people who live in districts with high rate of unemployment are more likely to oppose international trade than those who live in districts with low unemployment rates. District characteristics I controlled are the number of high skilled

differently to Republicans' pro-trade votes and Democrats' pro-trade votes.

	Dependent variable:			
	Vote for Trump (0: Hillary; 1: Trump)			
	(1)	(2)	(3)	(4)
Pro-Trade Vote (Obama's Second Term) × unemployedpcnt	$0.673^{**}$ (0.084.1.263)	$0.700^{**}$ (0.088.1.313)		
Pro-Trade Vote (114th Congress) × unemployedpcnt	(3.002,2.200)	(0.000,2.020)	$0.983^{**}$ (0.231.1.736)	$1.556^{**}$ (0.326.2.786)
Pro-Trade Vote (Obama's Second Term)	$-3.964^{**}$ (-7.495,-0.433)	$-4.268^{**}$ (-7.939,-0.597)	(*.==,=:==;	(3.323,2.133)
Pro-Trade Vote (114th Congress)			$-5.430^{**}$ (-9.758,-1.102)	$-8.996^{**}$ (-16.094,-1.898)
unemployedpcnt	$-1.956^{*}$ (-4.098,0.186)	$-2.046^{*}$ (-4.306,0.214)	$-1.607^{*}$ (-3.238,0.025)	$-2.766^{**}$ (-5.358,-0.175)
Pro-Trade Vote (113th Congress)			0.188	0.314
PartyIDR	9.738*** (6.175.13.302)	$10.551^{***}$	(-1.135, 1.506) $10.033^{***}$ (6.322, 13, 745)	(-1.527, 1.504) $12.909^{***}$ (6, 636, 19, 182)
$\log(\text{Education})$	(-0.727) (-3,136,1,683)	-0.843 (-3.173.1.487)	(-1.001)	(-4.586.0.925)
SpanHisLati	-0.101 (-2.787.2.585)	-0.069 (-2.851.2.713)	-0.466 (-3.174.2.243)	(-4.021.2.032)
$\log(Age)$	-0.281 (-2.544,1.983)	-0.177 (-2.478,2.125)	-0.505 (-2.882, 1.871)	-0.674 (-3.236,1.888)
$\log(\text{Income})$	$-0.901^{*}$ (-1.846,0.044)	$-0.871^{*}$ (-1.793,0.051)	$-0.894^{*}$ (-1.850,0.062)	$-0.871^{*}$ (-1.803,0.061)
rep.base		-86.117 (-197.546,25.311)		$-158.545^{**}$ (-299.772,-17.318)
PartyR	$4.222^{***} (1.216, 7.228)$	$6.072^{***} \\ (2.023, 10.121)$	$3.347^{**}$ (0.210,6.483)	$7.491^{**} (1.783, 13.199)$
States Fixed	Y	Y	Y	Y
Observations	286	286	286	286
Log Likelihood Akaike Inf. Crit.	-38.170 182.341	-36.849 181.698	-37.388 182.776	-34.088 178.177

Table 3: Legislators' Pro-Trade Roll Calls and Presidential Voting in 2016 by Districts' Unemployment Rate: Anti-Trade Respondents

**a.** Respondents' self-report party identification. **b.** Representatives' party affiliation. p<0.1; \*\*p<0.05; \*\*\*p<0.01

workers, the number of workers in manufacture industry, the number of total labor, the number of female, the number of hispanic and latino and mean income. All the variables are used as logged.

Trump 
$$\operatorname{Gain}_{ij} = \alpha_{i[j]} + \operatorname{Trade Vote}_i \times \operatorname{unemployedpcnt}_i \times \gamma + \mathbf{X}_{ij}\boldsymbol{\beta} + \epsilon_{ij}$$
(3)

To control for votes for third party candidates, I use two-party vote shares as a standard measure. For example, a two party vote share of Trump at district i is

$$\text{Trump Share}_{i} = \frac{\text{Trump Votes}_{i}}{\text{Trump Votes}_{i} + \text{Clinton Votes}_{i}}.$$

Then, the expected vote share for a Republican presidential candidate in a district i can be computed by averaging two most recent election results in district i:

$$\text{Republican Base}_i = \frac{\text{Romney Share}_i + \text{McCain Share}_i}{2}$$

Then, the Republican gain is defined by the deviation from the Republican Base:

Republican  $Gain_i$  = Trump  $Share_i - Republican Base_i$ 

Table 4 presents the results of the analysis using aggregate-level data. The dependent variable is a district' Trump vote share in 2016 presidential election. I fit OLS in the first and the third column and fit linear mixed effects model in the second and the last column. In column (1) and (2), the coefficients of the interaction term  $TradeVote_i \times unemployedpcnt_i$  show positive and significant relationship with Trump vote share in  $district_i$  with districts' ideology, demographic factors, and proportion of trade winners and losers controlled. This indicates that the effects of unemployment rate on districts' trump vote share increase by districts' representatives cast one more pro-trade vote. In column (3) and (4), representatives' trade roll calls during Obama's first term are controlled, the interaction terms are still significant.

Table 5 shows the effects of trade roll calls on economic voting in presidential election

using a different dependent variable: rep.gain. rep.gain indicates that changes in vote share for a Republican presidential candidate from the averaged Republican vote share given from the past two presidential elections. I fit OLS in the first and the third column and fit linear mixed effects model in the second and the last column. Even if pro-trade votes have effects of unemployment rate on presidential voting, the size of the coefficient is too small. Different levels of trade salience across the electorate or different levels of exposure to representatives' trade roll calls could be reasons for these small effects. For further study, measurement on trade salience across districts or measurement on levels of exposure to representatives' trade position is needed.

	Dependent variable: trump.share			
	OLS	linear mixed-effects	OLS	linear mixed-effects
	(1)	(2)	(3)	(4)
Pro-Trade Votes <sup><math>a</math></sup>				
(Obama's Second Term)				
× unemployedpcnt	0.001**	$0.001^{*}$	0.001**	0.001**
	(0.0001, 0.002)	(-0.00000, 0.002)	(0.0002, 0.002)	(0.00001, 0.002)
Pro-Trade Votes				
(Obama's Second Term)	$-0.007^{**}$	$-0.006^{**}$	$-0.007^{**}$	$-0.006^{**}$
	(-0.012, -0.001)	(-0.011, -0.0004)	(-0.013, -0.001)	(-0.011, -0.001)
unemployedpcnt	-0.005***	-0.005***	-0.005***	-0.005***
	(-0.008, -0.001)	(-0.008, -0.002)	(-0.008, -0.001)	(-0.008, -0.002)
Pro-Trade Votes				× · · /
(Obama's First Term)			0.0004	0.0003
			(-0.001, 0.002)	(-0.001, 0.002)
log(highskill)	$-0.082^{***}$	$-0.083^{***}$	$-0.082^{***}$	-0.083***
	(-0.104, -0.059)	(-0.104, -0.061)	(-0.104, -0.060)	(-0.104, -0.061)
log(Manufac)	0.005	0.004	0.005	0.004
	(-0.003, 0.013)	(-0.004, 0.011)	(-0.003, 0.013)	(-0.004, 0.011)
$\log(totalLabor)$	$0.269^{***}$	$0.273^{***}$	$0.270^{***}$	$0.273^{***}$
	(0.158, 0.380)	(0.173, 0.373)	(0.159, 0.381)	(0.173, 0.373)
$\log(\text{Female})$	$-0.121^{**}$	$-0.171^{***}$	$-0.121^{**}$	$-0.171^{***}$
	(-0.223, -0.019)	(-0.265, -0.077)	(-0.223, -0.019)	(-0.265, -0.077)
$\log(MeanInc)$	$-0.030^{**}$	$-0.027^{**}$	$-0.030^{**}$	$-0.027^{**}$
	(-0.054, -0.006)	(-0.050, -0.003)	(-0.054, -0.006)	(-0.050, -0.003)
$\log(\text{HisLatin})$	$-0.025^{***}$	$-0.024^{***}$	$-0.024^{***}$	$-0.024^{***}$
	(-0.029, -0.020)	(-0.029, -0.020)	(-0.029, -0.020)	(-0.029, -0.020)
$rep.base^{b}$	$1.082^{***}$	$1.069^{***}$	$1.081^{***}$	$1.068^{***}$
	(1.056, 1.109)	(1.044, 1.095)	(1.055, 1.108)	(1.043, 1.094)
States Fixed	Υ	Ν	Y	Ν
Observations	433	433	433	433
$\mathbb{R}^2$	0.986		0.986	
Adjusted $\mathbb{R}^2$	0.983		0.983	
Log Likelihood		924.090		917.778
Akaike Inf. Crit.		-1,822.180		-1,807.556
Bayesian Inf. Crit.		-1,769.260		-1,750.566

Table 4: Representatives' Pro-Trade Roll Calls and Economic Voting in 2016 Presidential Election

Cell entries are OLS coefficients. Confidence Intervals are in parentheses. Observations are at the congressional district level. The dependent variable is Trump's two party vote. **a.** The number of legislators' casting pro-trade roll calls. **b.** The average proportion of the two-party vote received by the Republican candidate in the two most recent presidential elections in his or her district.

	Dependent variable: rep.gain			
	OLS	linear mixed-effects	OLS	linear mixed-effects
	(1)	(2)	(3)	(4)
Pro-Trade Votes <sup>a</sup>				
(Obama's Second Term)				
× unemployedpcnt	$0.001^{**}$ (0.0002.0.002)	$0.001^{**}$ (0.0001.0.002)	$0.001^{***}$ ( $0.0003.0.002$ )	$0.001^{**}$ (0.0001.0.002)
Pro-Trade Votes	()	()	()	()
(Obama's Second Term)	$-0.005^{*}$	-0.004	$-0.006^{*}$	-0.005
	(-0.011, 0.001)	(-0.010, 0.002)	(-0.011, 0.0001)	(-0.010, 0.001)
unemployedpcnt	$-0.007^{***}$	$-0.007^{***}$	$-0.008^{***}$	$-0.007^{***}$
	(-0.011, -0.004)	(-0.011, -0.004)	(-0.011, -0.004)	(-0.011, -0.004)
Pro-Trade Votes				
(Obama's First Term)			0.001	0.001
			(-0.0003, 0.002)	(-0.0004, 0.002)
log(highskill)	$-0.105^{***}$	$-0.103^{***}$	$-0.104^{***}$	$-0.103^{***}$
	(-0.127, -0.083)	(-0.124, -0.083)	(-0.126, -0.082)	(-0.123, -0.082)
$\log(Manufac)$	0.005	0.004	0.006	0.004
	(-0.003, 0.014)	(-0.004, 0.011)	(-0.003, 0.014)	(-0.004, 0.012)
$\log(totalLabor)$	$0.265^{***}$	$0.290^{***}$	$0.267^{***}$	$0.289^{***}$
	(0.149, 0.381)	(0.187, 0.392)	(0.151, 0.383)	(0.186, 0.391)
$\log(\text{Female})$	$-0.149^{***}$	$-0.190^{***}$	$-0.147^{***}$	$-0.189^{***}$
	(-0.255, -0.042)	(-0.287, -0.093)	(-0.253, -0.041)	(-0.286, -0.092)
$\log(MeanInc)$	-0.012	-0.012	-0.013	-0.013
	(-0.037, 0.013)	(-0.036, 0.012)	(-0.038, 0.012)	(-0.036, 0.011)
$\log(\text{HisLatin})$	$-0.029^{***}$	$-0.028^{***}$	$-0.029^{***}$	$-0.027^{***}$
	(-0.034, -0.024)	(-0.032, -0.023)	(-0.034, -0.024)	(-0.032, -0.023)
States Fixed	Υ	Ν	Υ	Ν
Observations	433	433	433	433
$\mathbb{R}^2$	0.815		0.816	
Adjusted $R^2$	0.786		0.787	
Log Likelihood		913.991		908.439
Akaike Inf. Crit.		-1,803.983		-1,790.878
Bayesian Inf. Crit.		-1,755.134		-1,737.959

Table 5: Representatives' Pro-Trade Roll Calls and Economic Voting in 2016 Presidential Election

Cell entries are OLS coefficients. Confidence Intervals are in parentheses. Observations are at the congressional district level. The dependent variable is change in vote share of Republican presidential candidate. **a.** The number of legislators' casting pro-trade roll calls. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

### 4 Conclusion

In this paper, I have shown that legislative representation influences economic voting in 2016 presidential election. When it comes to trade policy formation, the legislative and the executive both exert power, have authority, and share responsibility. My theory predicts that voters have difficulties in attributing responsibility on issues with complex institutional responsibility and tend to punish both relevant actors. By using data from 2016 ANES, I show that trade-haters are more likely to punish incumbent party in presidential election for poor economic situation when they are poorly represented by their representatives. I further find that even economically similar districts show different levels of economic voting by representatives' trade votes.

These findings are quite new for extant literature on economic voting. Previous studies have examined the relationship between economic situation and presidential voting or the effects of representatives' performance on congressional election. This paper tries to link the two sets of literature, by arguing that legislative performance has effects on presidential voting. Voters are the ones who experience both legislative representation and executive performance, not one of them. Voters who have discontents about personal or natinoal economic situation influenced by trade but experience disconnected representation have incentives to show their discontents more strongly. They also have incentive to not only punish House incumbent, but also punish another relevant actor: presidential incumbent to elect more accountable representatives.

In seeking higher validity of the study, it's important to discuss some points. First, it's important to examine variations of voters' awareness of representatives' trade position. Depending on the level of awareness or that of exposure to representatives' position, the levels of voters' response to legislative representation also significantly vary. Some of representatives publish press releases more frequently or some are more exposed to media coverage. For example, representatives affiliated with the Ways and Means Committee are more likely to exposed to media when it comes to their trade position or trade roll call votes. Another point is that trade salience might vary across regions. TV campaign advertising on trade issues that is strategically aired increases trade salience in some counties. Campagin speeches,

local media, and other area-specific factors might also influence trade salience. When people make voting decisions, they rarely take into consideration the entire array of available relevant information (Krosnick and Brannon 1993). Rather, people tend to use information rapidly recognized. Hence, voters who live in districts where trade is highly salient for various reasons are more likely to consider trade-relevant information when they make voting decisions.

Lastly, this paper delivers somewhat different implications from previous studies on clarity of responsibility. The studies has concluded that complex institutional characteristics lead to less accountability and weaken the strength of economic voting since voters have difficulties in attributing responsibility. This paper, however, concludes by stressing the possibility that shared responsibility strengthens economic voting, since voters' lack of ability to properly attribute responsibility leads to punishing all relevant actors. Legislators and executives have long blamed each other for economic situations, policy outcomes, and poor performance. But in such circumstances, the blame might lead voters to punish the both branches of the government, rather than punish neither of them.

## 5 Appendix



Figure 1: Estimated Coefficient of Unemployment Rate on Trump Vote by Representatives' Pro-Trade Vote (114th Congress)

	Dependent variable:			
	Vote for Trump (0: Hillary; 1: Trump)			
	(1)	(2)	(3)	(4)
Pro-Trade Votes <sup><math>a</math></sup> (Obama's Second Term) $\times$ unemployedpcnt	0.070 (-0.031,0.170)	0.069 (-0.032,0.170)		
Pro-Trade Vote (114th Congress) × unemployedpcnt	<b>、</b> · · <i>·</i>	<b>x · · /</b>	$0.135^{*}$ (-0.016.0.287)	$0.135^{*}$ (-0.019.0.289)
Pro-Trade Vote (Obama's Second Term)	-0.245 (-0.882,0.392)	-0.239 (-0.878,0.401)	( , , ,	
Pro-Trade Vote (114th Congress)			-0.747 (-1.764,0.269)	-0.745 (-1.775,0.285)
unemployedpcnt	-0.001 (-0.362,0.361)	$\begin{array}{c} 0.006 \\ (-0.361, 0.374) \end{array}$	-0.017 (-0.346,0.312)	-0.016 (-0.355,0.323)
Pro-Trade Vote (113th Congress)			0.294	0.294
PartyIDR	$5.743^{***}$	$5.743^{***}$	(-0.114, 0.702) $5.777^{***}$ (5.092.6.461)	(-0.114, 0.702) $5.777^{***}$ (5.092, 6.461)
$\log(\text{Education})$	$(-1.012^{***})$ (-1.775, -0.249)	$(-1.018^{***})$ (-1.785, -0.251)	(-1.797, -0.259)	(-1.800, -0.258)
SpanHisLati	$-1.014^{*}$ (-2.032,0.004)	$-1.005^{*}$ (-2.027,0.017)	$-1.056^{**}$ (-2.076,-0.036)	$-1.055^{**}$ (-2.079,-0.030)
$\log(Age)$	$1.131^{***} \\ (0.399, 1.862)$	$1.134^{***} \\ (0.402, 1.866)$	$1.129^{***} \\ (0.395, 1.864)$	$\frac{1.130^{***}}{(0.394, 1.866)}$
$\log(\text{Income})$	$-0.334^{**}$ (-0.663,-0.005)	$-0.332^{**}$ (-0.662,-0.002)	$-0.339^{**}$ (-0.669,-0.008)	$-0.338^{**}$ (-0.670,-0.007)
rep.base		$\begin{array}{c} 4.045 \\ (-32.955, 41.045) \end{array}$		$\begin{array}{c} 0.548 \\ (-36.803, 37.899) \end{array}$
PartyR	$1.032^{**} \\ (0.206, 1.859)$	$\begin{array}{c} 0.987^{**} \\ (0.061, 1.912) \end{array}$	$1.096^{**} \\ (0.190, 2.002)$	$1.090^{**} \\ (0.093, 2.087)$
States Fixed	Y	Y	Υ	Υ
Observations	1,008	1,008	1,008	1,008
Log Likelihood	-224.555	-224.532	-223.788	-223.787
Akaike Inf. Crit.	563.110	565.064	563.576	565.575

Table 6: Legislators' Pro-Trade Roll Calls and Presidential Voting in 2016 by Districts' Unemployment Rate: All Respondents

**a.** Respondents' self-report party identification. **b.** Representatives' party affiliation. 20 \*p < 0.1; \*\*p < 0.05

<sup>\*</sup>p<0.1; \*\*p<0.05; \*\*\*p<0.01