

Weighing Economic Ideology

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Introduction

Elected officials implicitly, and often explicitly, depend upon some underlying logic to connect their preferred policy with market conditions. Even if thinly veiled self-interest, policy positions need some legitimation in rhetoric. This is most evident when legislating on economic policy; legislators feel compelled to clothe their constituent interests in theoretical garb, offering logic for why their preferred policy is really best for the nation as a whole.

Below we take a serious and comprehensive look at this legislative rhetoric, arguing that speech provides evidence not only for material interest of constituents but also, for the power of the legitimating arguments that are used to explain policy preferences. Our empirical focus is US tariff policy in both the 19th and 20th centuries; we choose trade policy debate for three reasons. First, there is evidence that from the time of Adam Smith on, America's elite knew of the British defense for open markets and the underlying logic being used in the British parliament to support a policy of trade liberalization. Yet, it took the US a century longer than in Britain for political leaders to see the principles as applicable to the US. This enables us to focus less on the creation of a new idea and instead at the more political question of when and why ideas enter political discourse. Second, legislative debate on the tariff has a long history, providing significant amounts of data. Setting a tariff level was a key part of funding the government until 1913 and its height was an issue that divided the parties. Third, there is variation over time in the tenor of debate as well as party position. This variation allows us to capture the relationship between changes in discourse and underlying shifts in the economy, thereby separating legislative shifts due to material concerns with changes with an ideational component.

While we are not the first to study the importance of economic ideas, we suggest that new computer tools enable scholars to map and assess the underlying ideas found in debates on trade policy in an innovative manner. Using natural language processing, we are now able to study congressional debate on trade legislation in a more inclusive fashion. Using speeches, we can delineate and then map how the logic of trade policymaking changed over time. While votes cast is an important metric of policy position, we suggest that the analysis of rhetoric is an important compliment to our understanding of policy decisions.

We focus on speech during two periods of US history: 1870-1901 and 1947-1961. Our interest is in delineating the underlying causal models used in defense of tariff policy and modeling its effects. We begin with the observation that legislative debate provides evidence for three different underlying ideational dimensions. We label these arguments: market efficiency, managed trade, and redistribution. As well as describing patterns of rhetoric, we show that there is variation in speech, both over time and in the weights of each of these arguments as an explanation for the vote. Using our data, we then estimate the relationship between the choice of a causal logic and characteristics of the speaker, focusing on differences between the

chambers, the parties, the material interests of the district and region. The data on rhetoric suggests that the opening of the US economy in the 20th century was not prefaced by a fundamental switch in congressional debate from one economic model to the next, that is, protection to free trade, but rather, we find that policy debate was more of a pendulum, in which the weights on these three dimensions shifted enough for a new consensus.

We organize this effort as follows. We first review the history of tariff legislation in the US and the genesis of our three underlying causal ideas. These ideas are the basis of our computer-assisted search. We then take up the question of the validity of using natural language and congressional speech as a metric of policy preference, both describing our data and organizing speech by the speaker's characteristics. Having shown the validity of our three dimensions, we then test a series of hypotheses that explain variation. We conclude with an assessment of the relationship between economic ideas, rhetoric and policy outcomes.

Three Themes

Agreeing on a national trade policy has never been easy for elected officials in the US. Representatives have districts with interests that vary dramatically with respect to global markets. Even in districts with similarly situated voters, representatives can go astray in matching interests with a corresponding policy because market effects are hard to model – the same economic forces can support different policy conclusions. Picking policy is even more difficult for a strategic representative who considers variation across districts and the probability of some compromise. Given these constraints, it is not surprising that policy needs and legislative outcomes are often out of sync. And given this level of uncertainty, it is unsurprising that legislators would rely on others to interpret the needs of the US economy.

A review of the history of the American debate, derived from pamphlets, newspapers and scholarly publications, suggests that there has been no shortage in ideas about tariff policy.¹ In fact, few public policies have been advocated and opposed by so many great minds for such a sustained period of time. Although the theoretical defense for the positions individuals took at any one time could well have been strategic, supporters of free trade tended to follow the teachings of David Ricardo and the European classicists, while the advocates of protection trace their roots to the more home growth works of Alexander Hamilton, Daniel Raymond and ultimately, Henry Carey. In the nineteenth and twentieth centuries, a preference for free trade predominated in American colleges and universities.² One should not,

¹ See Goldstein, 1993, for primary evidence on the early debates.

² Republicans did worry about the bias in colleges and tried to counter when possible. Calhoun reports of an exchange in 1883 between William D. Kelley, one of the most vociferous supporters of protectionism and first term Senator Aldrich that came along with a list of works by Henry Carey, Robert Thompson and others: "With these books on your shelves you will have a very complete collection of the works of the ablest expounders of the economic theories we accept." P. 294.

however, overstate the difference between intellectuals and laymen on this issue. Raymond and Carey, well-known protectionists were known to be brilliant economists well schooled in the European tradition. The writers on both sides saw the tariff issue as part of a larger theoretical model of how to grow the American economy -- they just disagreed on the policy direction.

As early as the 1820s, congressional representatives on both sides of the debate used economic logic to defend their position on the tariff. But economic logic was not only used to argue for the efficiency of a preferred trade policy. Rather, three distinct arguments were made on the floor of the House and Senate. First, political leaders regularly debated the proper relationship between market growth and tariff policy. This generated questions about policy such as-- did or did not taxes at the border influence growth in the domestic market; how much control could government exert over production via a product specific tax? Second, elected leaders worried about the uneven benefits that accrue from trade. Here, representative asked about government responsibility for correcting dislocations in labor and capital. Was this the result of market forces and if so, what were the policy options? Third, after the War of 1812, British commercial policy attempted to undercut U.S. industries in a variety of ways. Readers of the British Parliament's record could see that England's intent was to undermine America's ability to compete by undercutting infant industries. That experience supported a third line of argument on the role of the tariff, which centered on how the US should react to the predatory policies of other nations. Should trade be managed? Should imports that unfairly disadvantaged domestic market participants be stopped? What is clear from the debate was that speakers agreed on the goal of a diversified and growth oriented economy; they just proposed a different tariff policy to reach that end.

For long periods of time, each of the two political parties coalesced around a set of opposing policy recommendations, each integrating economic theory into an often-incongruent defense of their position. In the early 19th century, the argument in defense of intervention in the market lost out to a more laissez-faire government, even though the British were predatory and trade threatened the new manufacturers in the middle states. By the 1840s, the argument for a more interventionist government who could collect tariffs and encourage markets won out over the opposition, at least until the South organized resistance. By mid century supporters of free trade argued that commercial policy should not be used to foster economic development, that government was not responsible for abrogating market dislocation and that laissez faire was the optimal government policy. These ideas did not cluster for long and they lost salience with the demise of the Whigs and the creation of the Republican Party. The defense of protectionism, never as well specified as the free trade alternative was re-defined into a set of Republican principles: protection was a means to maximize wages, it assured a domestic market and high tariffs guarded the economy against changing international market forces. This causal packaging made protectionism --as compared to the liberal alternative-- attractive to political entrepreneurs in the embryotic Republican Party. This view would dominate trade policy, even as US interests in world trade expanded. But

while in the ensuing century the US leaned toward protectionism, none of the opposing positions ever disappeared.

Voting patterns reveal an interesting dynamic. While party platforms diverged on the tariff for most of the century that followed the Civil War, legislative voting converged twice, once at the end of the 19th Century around high tariffs and then again, in the 1950s, around tariff reform. In between, the votes were predictable and partisan. We illustrate this shift in figure 1 in the House using a measure of the percent of votes that were 'free trade.' It appears that there was a shift in voting patterns, with Democrats increasingly less likely to vote for 'free trade' and Republican more likely to vote for free trade starting in the 78th congress.

Figure 1

The Party Debate

Party affiliation may be an excellent predictor of trade related roll call, but votes alone cannot explain why the parties would converge and then diverge on the tariff. Some insight can be gleaned from platforms and as we suggest in the next section, floor speeches are a good predictor of attitudes. What were the parties saying about the tariff in these years?

The Democratic Party had the more coherent platform of the two, being almost uniformly negative on the tariff throughout the 19th century. The platform in 1876, for example, explicitly denounced the tariff, calling it, "*a masterpiece of injustice, inequality and false pretense, which yields a dwindling and not a yearly rising revenue, (and) has impoverished many industries to subsidize a few.*" Eight years later, the Democrats continue on, saying that the Republican tariff, "*professes the protection of American manufactures (but instead) has subjected them to an increasing flood of manufactured goods, and a hopeless competition with manufacturing nations...*" And by 1896, they tell us that the tariff is, "*disturbing to business ... (and) a prolific breeder of trusts and monopolies, enrich(ing) the few at the expense of the many, restrict(ing) trade and depriv(ing) the producers of the great America staples of access to their natural markets.*"

The irony of the Republican defense of high tariffs -- given their constituency in the Gilded Age -- was not lost on the Democratic Party. In 1890, Mills expounds at length on the lack of economic logic in the high tariff position, saying that, "*... to check importation is to check exportation... when we refuse to take from the people of Europe, of Canada, of South America, or of any other country the things which they offer to us in exchange for our products, the same Then, when we refuse to take from the people of Europe, of Canada, of South America, or of any other country the things which they offer to us in exchange for our products, the same interdiction which we make against the importation of their products is an interdiction against the exportation of ours; and just as we remove the restriction and permit the importation of their products, just so do we remove the barriers in the way of exportation of ours.*"

The Democratic critique was unrelenting. High tariffs were credited with creating trusts, undermining trade opportunities and distorting the market. Still, as the votes indicate, the party vote was changing, allowing the tariff to move upward, probably double necessary for government revenues. And, as the Democratic Party moved in their direction, the Republican platforms became more conciliatory. They allowed more products on the free list, for example and agreed that reform was an issue.

In 1876, for example, the Republican Party platform clearly and without concession extolled the tariff as necessary, *“to promote the interests of America labor and advance the prosperity of the whole country.”* In 1884, however, the platform was more nuanced, recognizing that the tariff created inequalities. But, the response could not be a simple reform because a horizontal reduction would be *“viscous and indiscriminate”* and not in line with the needs of labor. Still, in 1888, they agreed that tariffs should be reduced on products *“the like of which cannot be produced at home”* but that duties needed to be retained on products such as wool. Reducing tariffs, they stated had, *“always been accompanied by some economic disaster.”* The debate by the 1890s continued to be focused on specific industries. In 1892, the platform decried the democratic majority in the House’ attacks *“upon wool, lead and lead ores.”* They argued instead that the proper policy was a larger free list, mostly of products not made in the US; duties needed to be maintained, *“on all import coming into competition with the products of American labor...”* And in 1896, returning to power and wanting to repeal anything left over from the Democratic years, the tariff was defended as the, *“the bulwark of American industrial independence and the foundation of American development and prosperity.”* Cleveland’s tariff had been, *“sectional, injurious to the public credit and destructive to business enterprise.”* The tariff, they claimed, needed to protect American labor *“from degradation and the wage level of other lands.”*

By the late 1890s, platforms and speeches were not necessarily in sync. On one side, some Republicans were even more avid supporters than was the party. Nevada’s Republican Senator, John Jones, for example, argued on the floor that, *“if our people do not enter an industry the tariff should be made high enough to induce them to do so.”* And Vermont’s Senator Justin Morrill that, *“the country that does not largely rely upon its own home manufacturers is but an inferior servant of some other wiser and more prosperous people.”* In the Democratic Party, some members began to agree, with some expressing a fear that low tariffs would lead the US to become a raw materials exporter, dependent upon manufacturing nations as markets. Floor debate often relied on selective use of history, such as that the revolution was fought against *“the infringement by England on the industrial independence for the people of the American colonies”* (John Mitchell, Oregon). And the tariff was increasingly being used to explain other policies. For example, as labor organized for higher wages, the Republicans used their position on the tariff as an example of their protection of wage earners. William McKinley famously argued that, *“free trade may be suitable to Great Britain and its peculiar social and political structure but it has*

no place in this Republic where classes are unknown and where caste has long since been banished.”

Even with a new diversity of opinion on tariffs, trusts, and economic growth, the Republicans found themselves unable to disavow their high tariff position. On the eve of the Great Depression, the Republicans argued that the, *“protective tariff (w)as a fundamental and essential principle of the economic life of this nation,”* even while suggesting that, *“the present law requires revisions in the light of changes in the world competitive situation...”* To be clear, however, while FDR would later support tariff revision, the Democratic Party was no longer a cheerleader for free trade. Tariffs themselves were now acceptable if based on, *“legitimate business and a high standard of wages for American labor.”* Democratic representatives did not advocate the South’s pre-Civil War position or even their platform from the 1870s but rather, a tariff that would, *“permit effective competition, insure against monopoly,”* and reflect the, *“actual difference between the cost of production at home and abroad, with adequate safeguard for the wage of the American laborer must be the extreme measure of every tariff rate.”*

There was no support for horizontal tariff reductions on the eve of the Great Depression, not even among the traditionally supportive Democratic Party. This helps to explain the lack of tariff reductions, even after the Democratic Party controlled both Congress and the Presidency. The trade reform act, when finally legislated in 1934, reduced no tariffs but rather, legislated a reciprocal process of tariff reduction. But reciprocity was also a Republican idea and as tariff deals were struck, the Republican Party’s platform, as well as voting patterns, started to move closer to this revised Democratic position. By 1948, the platform supported *“the system of reciprocal trade and ... international commerce,”* and in 1952 *“favor(ed) the expansion of mutually advantageous world trade,”* and the *“elimination of discriminatory practices against our exports.”* By 1960, after two terms of Republican leadership, the two platforms were not much different, both endorsing the Trade Agreements Act. As argued by the Republican Party, because it was a policy that led to the, *“reduction of unjustifiable barriers to trade among free nations.”* The focus of both parties had moved to issues of unfair trade and the need to, *“safeguard American jobs and domestic industries against serious injury.”*

Economic Ideas, Text and Tariff Policy

How did elected officials explain their votes on the tariff, perhaps the most partisan and divided issue of the era? This was not a policy issue on which they could have no opinion and a large number of speeches every year in Congress were dedicated to explaining and defending the position of the person at the podium. To examine the dimensionality of this language we searched the congressional record and pulled any page on which the word tariff appeared. We then organized the pages by speech and captured who made the speech, their party membership and the year. These were then organized into two time periods in which voting patterns appeared to have shifted. This led us to collect pages of the Congressional Record between 1870

and 1901 and then again, between 1949 and 1960. In total, we had 518,000 speeches in the Senate and 67,000 in the House for the 19th century and 10,000 speeches in the House and 34,000 speeches in the Senate for our 20th century time period. To select only those speeches that may plausibly be related to trade, we restrict attention to only those speeches that have some direct reference to trade, tariffs, or at least three words with a greater than .3 association with trade and tariffs.

To analyze the speeches, we returned to party platforms and created a dictionary of words that appeared in the platforms by either of the two parties. These words were then arranged into categories that we felt approximated the three dimensions of debate on tariffs we found in the 1820s. For example, speech that included reference to whether or not a revenue or a protective tariff was good for the nation was classified as a discussion on the benefits of free trade. Words such as dumping or reciprocity were assumed to relate to the behavior of foreign nations and we put those words in the managed trade category. Finally, references to particular groups, such as the needs of farmers, were placed in our third category that related to the distribution of the gains from trade. Organized in this fashion, we created three causal models. The first, which as a short hand we refer to as the efficiency argument, relates to the benefits to the US has a whole of open trade borders; the second, which we label managed trade, collates speech that is oriented toward the strategic interaction of the US with other nations. Here, the logic of the speaker suggests that trade is good, but only if others are playing by the same rules as is the US. Finally, our third category, which we label distribution, is the set of comments having to do with individual costs and benefits of trade policy.

Not all of these arguments appear as equally salient across time and chamber. Table 1a and 1b organize speech by categories, assessing the way tariffs were explained by members of each group. For example, when democratic representatives spoke on tariff legislation, we coded their explanations for their policy position. We do this for a number of categories of interest: party, region and production patterns. We then divide the data by chamber.

Table 1a and 1b

Although our data is highly aggregated in these tables, a number of interesting patterns emerge. First, 19th and 20th century debate weights differently on our dimensions. The 20th century House was more concerned with our managed trade issues than in the 19th century and less concerned with distribution. Senate speakers are also more likely to talk about managed trade in the 20th Century than the 19th and less about distribution. Both Houses talk mostly about efficiency and the tariff in the 20th, when there is discussion. At this level of aggregation, we see little differences in our categories. The parties seem to weight their discussion on our dimensions similarly, even though they vote differently. This occurs in the 20th century as well.

We offer a second display of our categories in figures 2a and 2b. As illustration, we place each elected official on a rhetoric space, with each of our three causal models at a corner. Where our tables give a sense of categories of speakers, these figures display individual speech in the 19th century. Most speech is on our first and third dimension; speakers in the House were more dispersed than the Senate.

Figure 2a and 2b

Understanding the Dimensions of Trade Policy: Did Rhetoric Matter?

We organize our data so as to investigate a number of hypotheses on the relationship between rhetoric, votes and attributes of the speaker. Our interest is in the underlying relationship between causal models of the tariff and attributes of the speakers, over time. We begin with the question of whether or not rhetoric is a simple proxy for votes. Did all speakers in support of low tariffs have an argument in opposition to those who favored high tariffs? This engenders our first hypothesis.

H1. Rhetoric is distinct from positions on the tariff.

That is, patterns in speech pertain to the causal frameworks applied by politicians to the issue. This is in part a function of the method we employ. The unigram models of speech that we employ are much more likely to find a topic, dimension of discussion or valence, than a stance for or against a policy.³ The distinction between policy preference and rhetoric is also conceptual, as protectionism and free trade positions can occur on each dimension of our rhetorical analysis.

Second, the consensus view on tariff policy is that it was predictable from party membership. In fact, for most of the period we study, the tariff was one of the key defining elements of party platforms. Our second question thus relates to the relationship between party affiliation and rhetoric. Does each party take on a different explanation of how tariffs influence economic activity? We would expect that the economic and political position of Southern Democrats would discourage emphasis on concerns about redistribution. This gives us our second hypothesis.

H2: Partisanship and region predicts how a legislator explains his position on the tariff.

³ The statistical models summarized in tables 2a-8a regress a measure of each rhetorical dimension averaged by member of congress. These rhetorical dimensions are estimated from a simple unigram model of speech that calculates the relative intensity of speech in one of three lists of words. In this model, redistributive concerns in trade speeches are coded the same by two instances of the word 'farmer' in a speech as one instance of 'worker' and one instance of 'laborer', normalized by the intensity of each of the other two issue areas.

Third, the House, because of its taxing authority, initially controlled tariff policy; after 1934, the Senate role becomes as prominent because tariff setting occurs through bilateral or multilateral agreements with other nations. Is this shift in chamber reflected in rhetoric, ie, does the Senate indulge in 'cheap talk' in the period in which tariff setting is a House activity but less so when they have more authority? Is the House more particularistic because of small districts and short election cycles? In short, we are interested in whether or not floor debate varied in the chambers in each of our periods and pre and post 1934 delegation.

Specifically, we expect that the constitutional role of the House of Representative in setting tariff policy would both increase the attention to the distributional and efficiency concerns, particularly in more affected jurisdictions. This gives us hypotheses as to the nature of chambers and time.

H3a: Debates in each chamber will focus on different causal models. The House will be more interested in distribution; the Senate interested in managed trade. This difference will be greater in the 20th than the 19th century.

H3b: Over time, there will be more variation in the Senate than the House.

Last, we know that trade influences constituents differently and thus we would expect that representatives' position on the tariff is associated with the interests of their district. To measure this responsiveness, we take two different approaches. First, we ask whether or not districts that are more connected to global markets will have their representatives approach the tariff differently. We assume that it is not just a shadow price that determined the gains from trade but the transaction costs associated with bringing products to the market. We thus investigate whether positions on the tariff changed as parts of the nation became increasingly connected to world markets. We hypothesize that we can measure change in interest by looking at increasing connectivity via railroads. We test this for the 19th century part of our data.

H4a: Efficiency rhetoric is higher in districts and regions connected to international markets by railroads.

Our second measure of interest is more traditional, that is, we assume that the production pattern of constituents will influence the position taken on the tariff. We look directly at production patterns but with an eye to the Western states. We know that the West should have been pro-tariff liberalization based on relative productivity but was aligned with the Republican coalition. We expect that changes in rhetoric, that is, their defense of their tariff votes, may be an alternative measure of the speed and intensity of how interests are interpreted by political elites. To be able to interact our RR measures with our production measures, we also focus here on the 19th century.

H4b: Congressional speech should focus on redistributive concerns less often in sectors characterized by farming, reflecting the efficiency of American agriculture.

Results

We begin with the relationship between rhetoric, votes and party, our two first hypotheses. The analysis is divided by chamber, our third hypothesis so as to see if there is variation across the legislative Houses over time.

Rhetoric, votes, chamber and party

Table 2a and 2b organize our data by speaker and by rhetoric model for the House and 3a and 3b for the Senate. We are interested in whether or not the rhetoric used was predictable by votes, party and region in each chamber. We know that party is a significant predictor of tariff votes in both the 19th and 20th century. Our interest, however, is less the vote itself but rather, the explanation for the vote and how that varies with our variables of interest. As opposed to figure 2 above, which is a dot plot of the proportion of time a speaker relied on one of three dimensions when he spoke, our new tables integrate that choice with amount of speech as well as our other variables.

Table 2a and 2b
Table 3a and 3b

We can now assess whether or not the amount of time a person spoke, i.e., how important the subject was to him, is related to a causal model. In the 19th century House, we see that those who were the most ardent and often speakers on the floor about the tariff were less likely to talk about why tariffs were good for markets, our efficiency model and more likely, when they spoke, to talk about distributional issues and international competition. In the House in the 20th century, those most interested in tariff policy were also more likely to talk about distribution issues but not necessarily efficiency. In the Senate in the 19th century, the most ardent on tariff policy were also the least likely to talk about the efficiency benefits of trade and most likely to bring up elements of individual distributional costs. In the 20th century, we now see a switch—those who are most likely to talk about tariffs are now more often talking about the relationship between trade and market efficiency.

Second, looking at how votes and speech interact, we see that in the House in the 19th century, those who voted for free trade defended their vote by arguing for the market benefits of low tariffs. They were, however, less vocal than were their opponents. The free trade proponents were also less likely to talk about the distributional effects of tariffs but no more or less likely to mention foreign producers. In the 20th century, the relationship between free traders and market efficiency remains but it is weak. In the Senate, there is no coherent model associated with free trade votes in either the 19th or 20th century.

Third, there are only small party differences. Democrats in the 19th Century House were more likely than were Republicans to mention foreign producers but both sides of the aisle used the other two models at about the same rate. In the 20th century, House democrats talked less about market efficiency and more about foreign producers and markets. This is consistent with the changes in party platform in the period. In the Senate, democrats and republicans talked about tariff in about the same way. No one model is associated with one of the two parties.

Last, we see very small regional differences. In the House, these appear in the 20th century, with the South and West now least likely of the regions to talk about the tariff in conjunction with foreign trade practices. No pronounced differences appear in Senate debate across regions. This is not to say that the regional elected officials agreed but rather, that they were not prone to using one model when talking about trade policy.

Constituency Interests and Rhetoric

Open borders create opportunities for growth but also competition in the domestic market. If representatives were most interested in consumer interests and/or price levels, they would support free trade in most situations. But producer interests vary by their relative productivity and elected officials are attuned to those interests in their districts and states. While the two parties were closely associated with one or the other side of the debate on the virtue of open markets, individual representatives had a harder or easier time connecting their constituent interests with policy, depending upon what they produced and where they were located.

To look at this variation, we begin by asking whether or not connectivity to world markets influenced the rhetoric of the representative. In the 19th century, the transcontinental railroad was completed and parts of the US became relatively more or less able to bring products to international markets. While this connectivity does not appear in party votes, we want to know whether it changes how individuals interpreted trade policy. To do that, table 4a looks at the House debate in the 19th century and 4b at debate in the 20th century. Table 5 a and 5b repeat this for the Senate. We measure connectivity by the amount of track that had been built by 1880. Again, we include total speech so that we can assess not just what is said but also a control for how often the speaker takes to the floor. Connectivity to markets, as expected is significantly related to rhetoric on efficiency—if you had the ability to bring products to market, your representative was more likely to think about tariff policy in this way. Those officials were less likely to talk about redistribution problems with open markets. We can assume that growth and not decline was foremost in how they spoke about tariff policy. Not surprisingly, those from the Western region were more likely to see tariff policy as associated with market efficiency and less likely to worry about foreign producer competition. For comparison, we show the same equations in the 20th century and in a period in

which the US market has become globalized. The RR effect, evident in the earlier era has disappeared.

Table 4a and 4b
Table 5a and 5b

To examine constituent producer interests, we now add information about our districts into our models in tables 6 and 7. We focus on two producer groups: farmers and manufacturers and the 19th century.⁴ RRs remain significant as in 4a. As well, we see that representatives from farming districts were more likely to talk about the selective effects of trade to farmers. We find no effect of manufacturing, which could reflect that the US is a newly emerging manufacturing nation that has not yet engaged in exports. There is a regional effect in the West of a small use of our managed trade model but otherwise we don't see any regional variation in the House. In the Senate, none of these effects are evident.

Table 6 and 7

Summary of Findings: We now return to our assessment of the underlying logic behind trade, votes and our four hypotheses. To summarize our findings, first, the data showed that votes do not totally predict how elected officials will explain their policy position. Elected officials, who cast the same vote on a tariff bill appear to offer very different explanations to constituents for that vote. Second, partisanship is a weak predictor of rhetoric surrounding the tariff although Democrats more often relied on language pertaining to efficiency, even controlling for member's substantive position for or against free trade. Third, the correlations we observed in the House did not hold in the Senate. In addition, over time, the Senate became increasingly balanced in its arguments for trade, that is, no one argument appeared to be significant in our models. This suggests that the issue areas we identified in congressional speech are sensitive to institutional context. Fourth, we do find an effect of connectivity to markets and some importance of the type of production although the finding was stronger for farm than manufactures.

Extensions

Historical context: We have shown that the 19th and 20th century differed in the relative use of our rhetoric models. To take a more historical approach to our data, we use ideal point estimation for our three models over time to see if a pattern emerges. We focus here on the House and look at how preferences for one or the other model varied across party and time.

⁴ The variables we used are the log of the total number of farms in 1890 from the Statistics of Agriculture in The United States at the Eleventh Census, (1896) and the log of the value of Implements and Machinery Production from the Report on Manufacturing Industries in the United States at the Eleventh Census (1896).

Figure 3

Figure 3 shows how our three economic arguments resonated across the partisan divide over time. For example, sentiment was particularly divided in the 48th and 52nd Congress' on the distributional affects of the tariff, and the 51st and 52nd Congress' for our other two dimensions. Consistent with the historical record, acrimony was intense on the tariff during and between the Cleveland presidencies. Divided government fueled polarization of speech and to some extent, policy. It is interesting to note that when Republicans retake the House during the second Cleveland years, the remaining Democrats move closer to those across the aisle on two of our three dimensions.

We also see that our managed trade dimension became increasingly salient over time. Again consistent with the historical record, we see that legislating to counter 'cheating' and/or assure a level-trading field, which had been a 19th century Republican issue eventually became a bipartisan position in both chambers. Why does managed trade become salient? It is possible that the language of managed trade may itself have reflected a strategic political decision by advocates of free trade to incorporate concerns over international reciprocity without compromising on their support for trade liberalization. Prior to 1923, the US practiced conditional MFN, requiring existing trade agreement partners to make additional concessions to benefit from subsequent US deals. This practice had long historic roots -- to support a protectionist policy against Prussia, as example, a Republican House Member, John Dalzell defended the policy as in line with US foreign policy since Jefferson. Citing John Quincy Adams' comments that, *"the 'favored-nation clause' in the treaty of 1803 with France only covered gratuitous favors, and did not touch concessions for equivalents, express or implied,"* he argued that any other view would be inconsistent with the provisions of the Federal Constitution, which prescribes that *"all duties, imposts and excises shall be uniform in the United States, and that no preference shall be given by any regulation of commerce or revenue to the ports of one State over those of another."* [The Congressional Record 1464 Jan 28 1895] It appears that the Republican calls for reciprocity in the 19th century were more about blocking unilateral tariff reductions than ensuring foreign market access, and that free trade advocates managed to use reciprocity in the 20th century to bolster, rather than prevent, tariff liberalization. Thus when the GATT eventually incorporates a reciprocity norm from the RTAA treaties, it was no longer as an excuse to retain protection.⁵

The partisan rancor of the late 19th century tariff debate evaporates in the House in the 20th century. We see that on all three of our dimensions, language coheres after 1947, even when there is Republican president. Although votes continue to be

⁵ Between 1934 and the formal creation of the GATT in 1948, the US had concluded 32 bilateral treaties with trading partners. The GATT itself borrowed much of its language from these RTAA agreements, including this fundamental norm of reciprocal benefits.

partisan until the late 1950s, the underlying logic of open markets is evident in floor debate; overall, speech is becoming very similar and supportive of open trade borders.

RRs and Connectivity: To extend our RR finding, we look more closely at Western elected officials and how they explain their votes. Eric Foner in his classic study of the rise of the Republican Party in the 1850s, explains how and why the West became associated with the pro-protection position of the Party. By 1870, however, subscribing to a policy position of closed markets was counter-intuitive, given the competitive position of Western farmers. Yet, the West remained pro-protection as measured by votes. Why didn't they vote with the opposition? Did they misconstrue their interests?

Table 8a and 8b

To answer that question we look at the 19th century house to see if variation in the amount of railroads are associated with any particular rhetoric logic. Our RR track measure varies across regions and captures variation in the ability of producers to get products to market. We take advantage of that variation and assess whether more railroads made representatives more open to free trade ideas. The data suggests that RRs and free trade ideas are associated with each other. First, having railroad accessibility in your district lead the elected official to be more likely to associate trade and efficiency; as well, it decreased the use of distributional arguments. Second, the effect was more pronounced in the West.

It appears that the West was, in fact, moving away from the republican coalition in terms of underlying defense for closed markets, even though we do not see this in votes. To bring this insight into the post protection era, we do a simple model of voting post-1947, including our RR measure. We see now that among western states, having had railroads is positively associated with subsequent free trade votes, but not among the rest of the country. Taken together, it appears that the nature of industry changed significantly in the Gilded Age. As the West became more connected to world markets, representatives from this region changed their arguments about trade, looking more akin to 20th century free traders. But the effects of connectivity shifts in the 20th century. While railroad intensive western states continued to develop, much of the rest of the country found its industrial base increasingly competing with global markets and we now see 1890's era connectivity generating economies more aligned with protectionist interests.

Rhetoric as data: In conclusion, we suggest that the analysis of speech can add significant value to scholars for at least two reasons. First, at least in this domain, counting votes is an overly blunt tool for analytic purposes. Although highly partisan, elected officials have always defended their trade policy votes differently. The classic case for free trade found in economics textbooks makes an appearance on the floor of congress as early at the 1820s, but as well, concerns over predatory behavior on the part of trading partners and worries about whether constituents

will garner equal benefits from increased trade were as, or more, central to the concerns of elected officials. From votes, analysts cannot know which part of the debate explains an elected official's preferences on the policy nor whether changes in rhetoric are precursors of a change in vote or reflective of that shift. In the modern era we might turn to a poll, or some experiment, to find out what representatives are thinking but for many of the most interesting historical cases, such data is unavailable. Text analysis, not as straightforward as a survey, may be an important supplementary tool to understand these cases.

Second, our data enables us to show that more than underlying material factors may determine votes. Most analysts assume that trade preferences derive from an understanding of the benefits of open markets combined with some analysis of how either sectors or factors in districts will fare if they have to compete abroad. We found that elected officials had a more robust distribution of preferences on trade policy. Further, parties differed on these categories to different extents and they change at differential rates across time and region. The mismatch between interests and the articulation of how to meet those interests may be a fundamental part of politics that still needs to be investigated.

Table 1A

19th Century House

Dems	0.51	0.08	0.42
Reps	0.51	0.11	0.38
South	0.53	0.09	0.38
West	0.49	0.05	0.46
Midwest	0.49	0.09	0.42
North	0.54	0.11	0.35
Farms	0.51	0.09	0.40
NoFarms	0.51	0.09	0.40
Manufact	0.51	0.10	0.39
NoManufac	0.51	0.09	0.41
railroads	0.51	0.10	0.39
Norailroads	0.51	0.09	0.41

20th Century House

Dems	0.63	0.14	0.23
Reps	0.60	0.14	0.26
South	0.64	0.13	0.23
West	0.63	0.11	0.25
Midwest	0.59	0.16	0.25
North	0.61	0.13	0.26
Farms	0.62	0.14	0.24
NoFarms	0.61	0.14	0.25
Manufact	0.59	0.15	0.26
NoManufac	0.64	0.13	0.23
railroads	0.61	0.15	0.24
Norailroads	0.62	0.13	0.24

Table 1B

19th Century Senate

Democrats	0.45	0.10	0.45
Republicans	0.44	0.09	0.47
South	0.48	0.09	0.43
West	0.42	0.09	0.48
Midwest	0.44	0.10	0.46
North	0.42	0.08	0.50
Farms	0.45	0.10	0.45
No Farms	0.43	0.09	0.48
Manufacturing	0.45	0.10	0.45
No Manufacturing	0.43	0.09	0.48
Railroads	0.45	0.10	0.45
No Railroads	0.44	0.09	0.47

20th Century Senate

Democrats	0.60	0.12	0.29
Republicans	0.57	0.11	0.32
South	0.61	0.10	0.28
West	0.55	0.13	0.31
Midwest	0.59	0.11	0.30
North	0.59	0.10	0.31
Farms	0.61	0.11	0.28
No Farms	0.56	0.12	0.32

Table 2A: Rhetoric, Votes, Party and Region, 19th Century House

=====			
	Dependent variable:		
	Issue 1	Issue 2	Issue 3
	(1)	(2)	(3)

Free Trade Votes	0.099 (0.044)	0.009 (0.019)	-0.068 (0.034)
Democrats	-0.034 (0.031)	-0.024 (0.014)	0.039 (0.024)
Total Speech	-0.008 (0.002)	0.003 (0.001)	0.013 (0.002)
Northeast	0.011 (0.030)	0.014 (0.013)	-0.019 (0.024)
West	0.050 (0.054)	-0.031 (0.024)	0.036 (0.042)
South	-0.016 (0.032)	0.022 (0.014)	0.001 (0.025)
Constant	0.668 (0.025)	0.051 (0.011)	0.193 (0.020)

Observations	586	586	586
=====			

Note: Coefficients derived from OLS, standard errors in parentheses.

Table 2B: Rhetoric, Votes, Party and Region, 20th Century House

=====			
Dependent variable:			
	Issue 1	Issue 2	Issue 3
	(1)	(2)	(3)

Free Trade Votes	0.114 (0.052)	-0.028 (0.032)	-0.032 (0.039)
Democrats	-0.067 (0.033)	0.042 (0.020)	0.021 (0.024)
Total Speech	0.0001 (0.002)	0.0001 (0.001)	0.004 (0.001)
Northeast	0.017 (0.037)	-0.030 (0.023)	-0.039 (0.028)
West	0.051 (0.047)	-0.065 (0.029)	0.013 (0.036)
South	0.070 (0.040)	-0.064 (0.024)	-0.020 (0.030)
Constant	0.606 (0.033)	0.152 (0.020)	0.186 (0.025)

Observations	313	313	313
=====			

Note: Coefficients derived from OLS, standard errors in parentheses.

Table 3A: Rhetoric, Votes, Party and Region, 19th Century Senate

=====			
Dependent variable:			
	Issue 1	Issue 2	Issue 3
	(1)	(2)	(3)

FT votes	0.012 (0.050)	-0.040 (0.030)	0.029 (0.050)
Democrats	0.003 (0.033)	-0.005 (0.019)	0.002 (0.033)
Total Speech	-0.012 (0.004)	0.002 (0.002)	0.011 (0.004)
Northeast	0.010 (0.031)	0.009 (0.018)	-0.018 (0.031)
West	0.044 (0.031)	-0.028 (0.018)	-0.016 (0.031)
South	-0.002 (0.034)	0.022 (0.020)	-0.021 (0.034)
Constant	0.635 (0.030)	0.081 (0.018)	0.284 (0.030)

Observations	151	151	151
=====			

Note: Coefficients derived from OLS, standard errors in parentheses.

Table 3B: Rhetoric, Votes, Party and Region, 20th Century Senate

=====			
Dependent variable:			
	Issue 1	Issue 2	Issue 3
	(1)	(2)	(3)

FT votes	-0.070 (0.096)	0.058 (0.056)	-0.062 (0.086)
Democrats	0.043 (0.048)	-0.014 (0.028)	-0.020 (0.043)
Total Speech	0.008 (0.004)	0.0003 (0.002)	-0.001 (0.004)
Northeast	0.065 (0.053)	0.021 (0.031)	-0.046 (0.047)
West	0.023 (0.049)	0.022 (0.029)	0.028 (0.044)
South	0.033 (0.050)	-0.002 (0.029)	0.023 (0.044)
Constant	0.459 (0.042)	0.103 (0.025)	0.351 (0.038)

Observations	141	141	141
=====			

Note: Coefficients derived from OLS, standard errors in parentheses.

Table 4A: Trade and Railroads, 19th Century House

=====			
	Dependent variable:		
	Issue 1	Issue 2	Issue 3
	(1)	(2)	(3)

ln(Railroads 1880)	0.053 (0.019)	-0.009 (0.008)	-0.028 (0.015)
Total Speech	-0.008 (0.002)	0.003 (0.001)	0.012 (0.002)
Northeast	0.009 (0.030)	0.011 (0.013)	-0.016 (0.023)
West	0.113 (0.059)	-0.044 (0.027)	0.004 (0.047)
South	0.037 (0.036)	0.001 (0.016)	-0.018 (0.028)
Constant	0.238 (0.158)	0.124 (0.071)	0.420 (0.124)

Observations	586	586	586
=====			

Note: Coefficients derived from OLS, standard errors in parentheses.

Table 4B: Trade and Railroads, 20th Century House

```

=====
                                Dependent variable:
                                -----
                                Issue 1   Issue 2   Issue 3
                                (1)      (2)      (3)
                                -----
ln(Railroads 1880)              0.010    -0.008    -0.008
                                (0.018)  (0.011)  (0.013)

Total Speech                    0.0002    0.00002   0.004
                                (0.002)  (0.001)  (0.001)

Northeast                      0.014    -0.026    -0.039
                                (0.037)  (0.023)  (0.028)

West                           0.057    -0.074     0.003
                                (0.056)  (0.034)  (0.042)

South                          0.052    -0.052    -0.020
                                (0.042)  (0.025)  (0.031)

Constant                       0.519    0.228     0.254
                                (0.153)  (0.092)  (0.113)

-----
Observations                    313      313      313
=====

```

Note: Coefficients derived from OLS, standard errors in parentheses.

Table 5A: Trade and Railroads, 19th Century Senate

=====			
	Dependent variable:		
	Issue 1	Issue 2	Issue 3
	(1)	(2)	(3)

ln(Railroads 1880)	-0.003 (0.011)	-0.006 (0.006)	0.009 (0.011)
Total Speech	-0.012 (0.004)	0.002 (0.002)	0.010 (0.004)
Northeast	0.007 (0.031)	0.009 (0.019)	-0.015 (0.031)
West	0.039 (0.035)	-0.035 (0.021)	-0.004 (0.035)
South	0.002 (0.027)	0.002 (0.016)	-0.004 (0.027)
Constant	0.657 (0.086)	0.123 (0.051)	0.220 (0.086)

Observations	151	151	151
=====			

Note: Coefficients derived from OLS, standard errors in parentheses.

Table 6: Interest and Rhetoric, 19th Century House

=====			
Dependent variable:			
	Issue 1	Issue 2	Issue 3
	(1)	(2)	(3)

ln(Railroads 1880)	0.064 (0.036)	0.005 (0.016)	-0.085 (0.029)
ln(Farms)	-0.0003 (0.0004)	-0.0001 (0.0002)	0.001 (0.0003)
Manufacturing	0.013 (0.027)	-0.005 (0.012)	-0.005 (0.021)
Total Speech	-0.008 (0.002)	0.003 (0.001)	0.012 (0.002)
Northeast	0.0001 (0.032)	0.007 (0.014)	0.009 (0.025)
West	0.102 (0.062)	-0.051 (0.028)	0.039 (0.048)
South	0.052 (0.041)	0.004 (0.019)	-0.046 (0.033)
Constant	0.196 (0.266)	0.027 (0.119)	0.755 (0.209)

Observations	586	586	586
=====			

Note: Coefficients derived from OLS, standard errors in parentheses.

Table 7: Interest and Rhetoric, 19th Century Senate

	Dependent variable:		
	Issue 1 (1)	Issue 2 (2)	Issue 3 (3)
ln(Railroads 1880)	-0.004 (0.017)	-0.006 (0.010)	0.010 (0.017)
ln(Farms)	0.001 (0.0003)	-0.0002 (0.0002)	-0.0003 (0.0003)
Manufacturing	-0.041 (0.021)	0.018 (0.013)	0.023 (0.022)
Total Speech	-0.013 (0.004)	0.002 (0.002)	0.010 (0.004)
Northeast	0.007 (0.034)	0.009 (0.020)	-0.016 (0.034)
West	0.037 (0.039)	-0.033 (0.023)	-0.003 (0.039)
South	-0.026 (0.030)	0.014 (0.018)	0.012 (0.030)
Constant	0.624 (0.115)	0.140 (0.069)	0.236 (0.117)
Observations	151	151	151

Note: Coefficients derived from OLS, standard errors in parentheses.

Table 8A: Trade and Railroads, 19th Century House

```

=====
                                Dependent variable:
                                -----
                                Issue 1   Issue 2   Issue 3
                                (1)       (2)       (3)
                                -----
ln(Railroads 1880)              0.053    -0.009    -0.028
                                (0.019)  (0.008)  (0.015)

Total Speech                    -0.008     0.003     0.012
                                (0.002)  (0.001)  (0.002)

Northeast                       0.009     0.011    -0.016
                                (0.030)  (0.013)  (0.023)

West                            0.113    -0.044     0.004
                                (0.059)  (0.027)  (0.047)

South                          0.037     0.001    -0.018
                                (0.036)  (0.016)  (0.028)

Constant                       0.238     0.124     0.420
                                (0.158)  (0.071)  (0.124)

-----
Observations                    586       586       586
=====

```

Note: Coefficients derived from OLS, standard errors in parentheses.

Table 8B: Votes and Historical Railroads, 20th Century House

=====			
Dependent variable:			

Free Trade Votes			
	(1)	(2)	(3)

Railroads1890pc	-34.140 (12.220)	-28.178 (11.814)	-27.243 (11.878)
West	-0.187 (0.087)	-0.139 (0.084)	-0.145 (0.085)
Railroads1890pc:West	37.109 (16.097)	29.869 (15.550)	28.832 (15.613)
Democrats		0.150 (0.030)	0.162 (0.033)
South			-0.029 (0.037)
Constant	0.294 (0.033)	0.197 (0.037)	0.199 (0.037)

Observations	306	306	306
=====			

Note: Coefficients derived from OLS, standard errors in parentheses.

Figure 1: Party and Tariff Votes, by congress, and Chamber

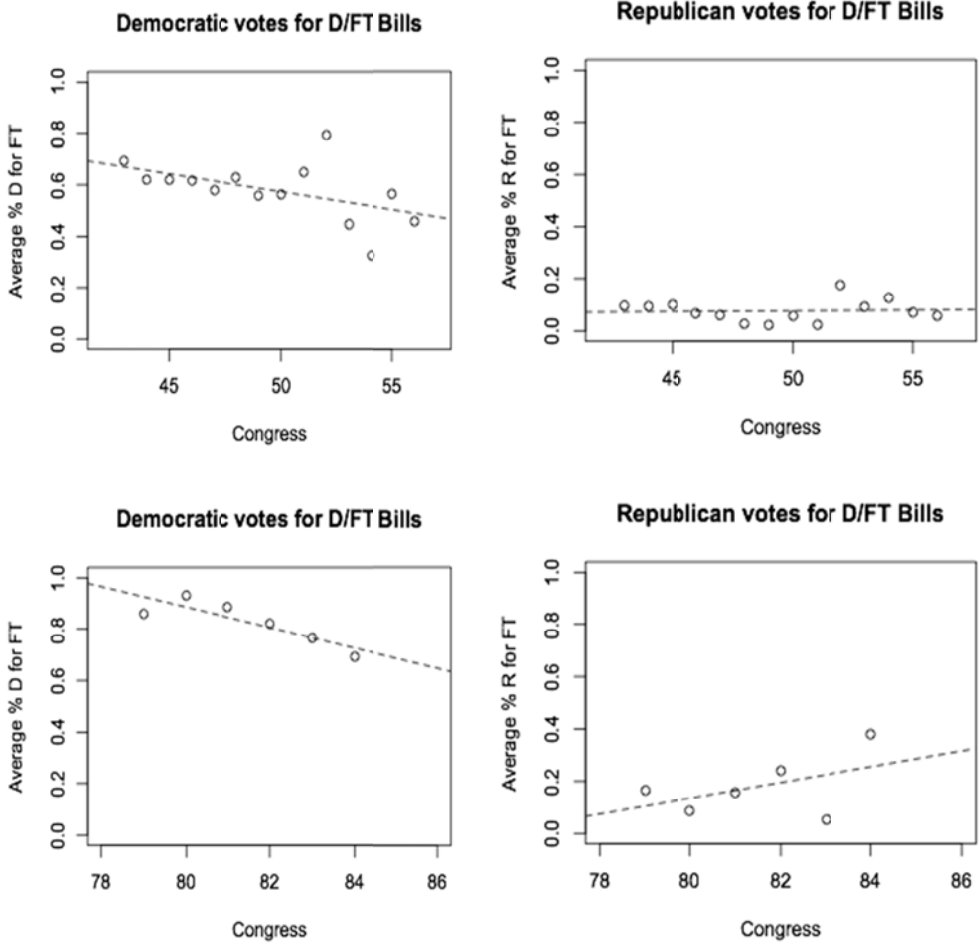
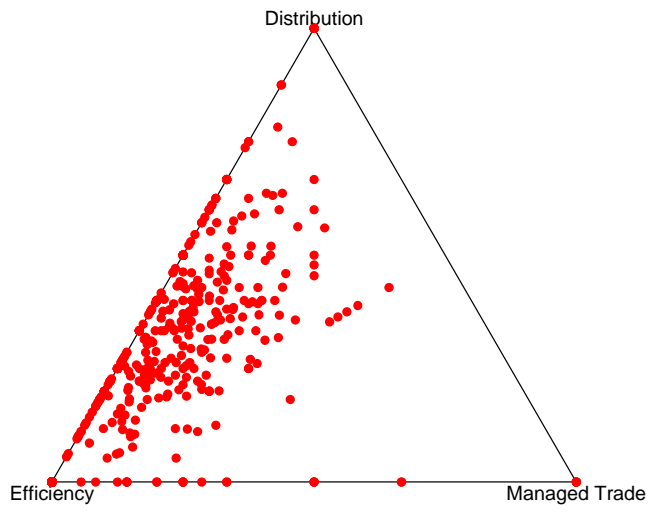


Figure 2

House Positions 19th Century



Senate Positions 19th Century

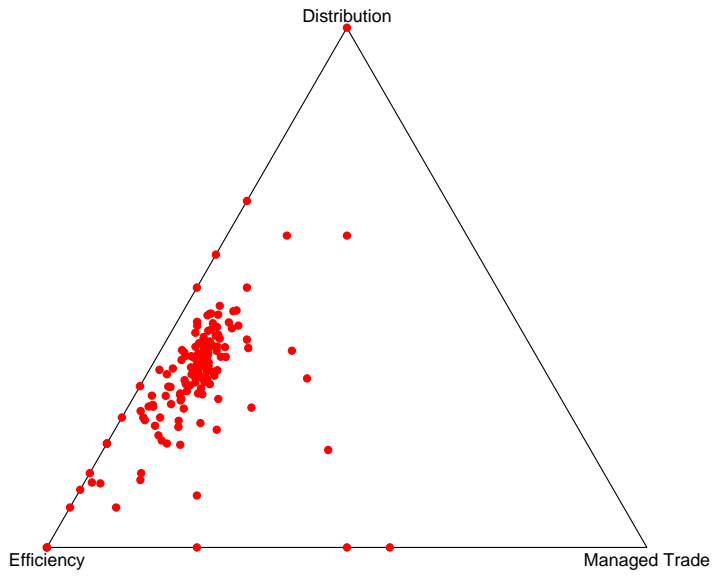
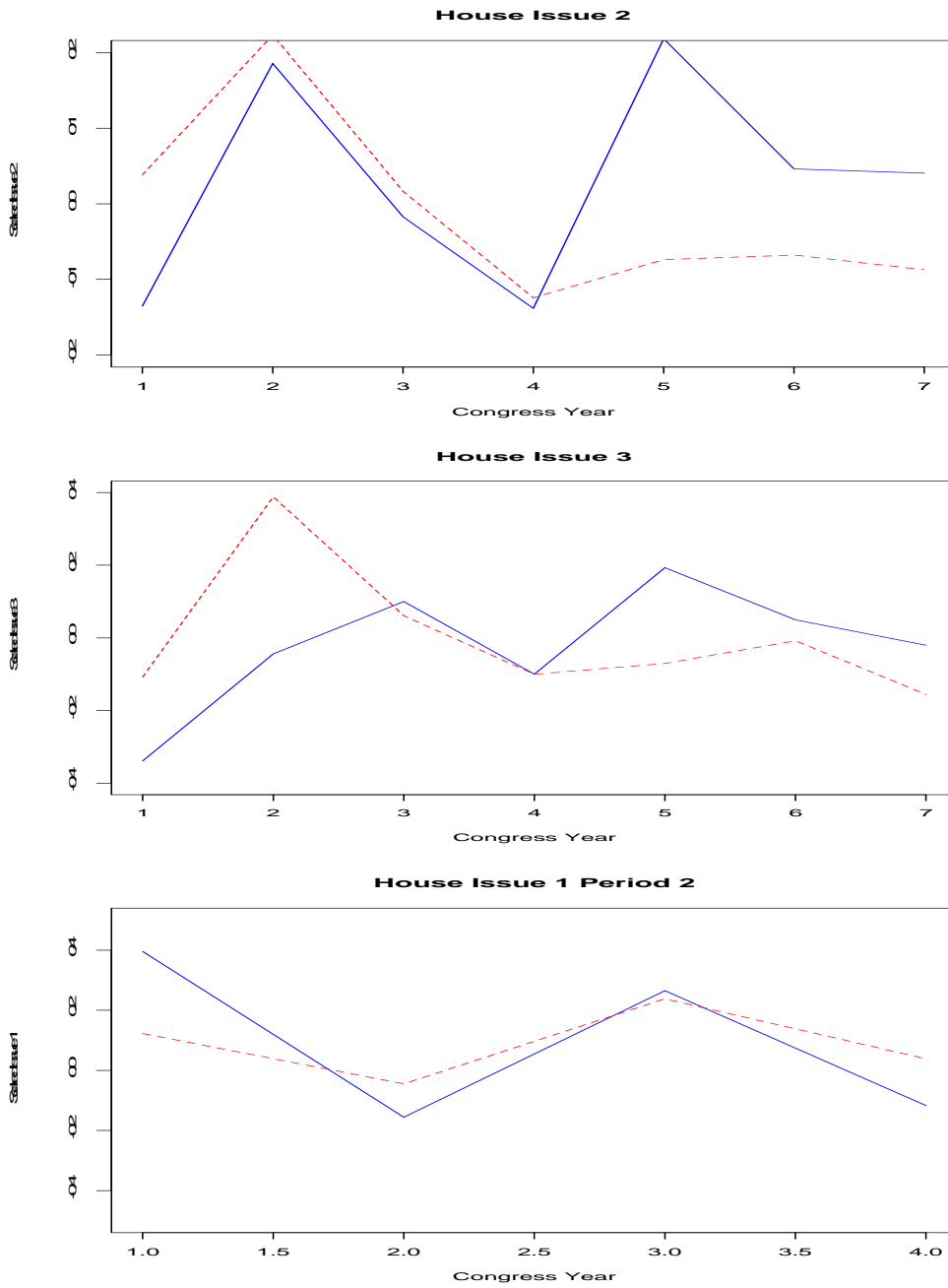
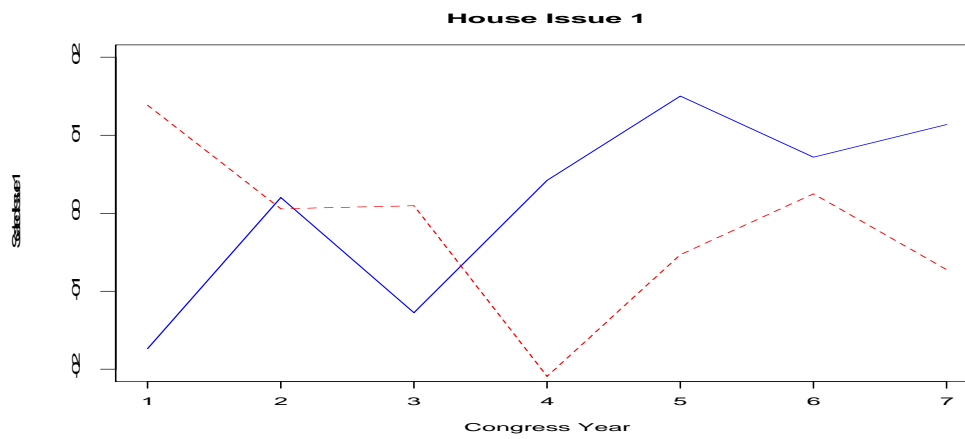
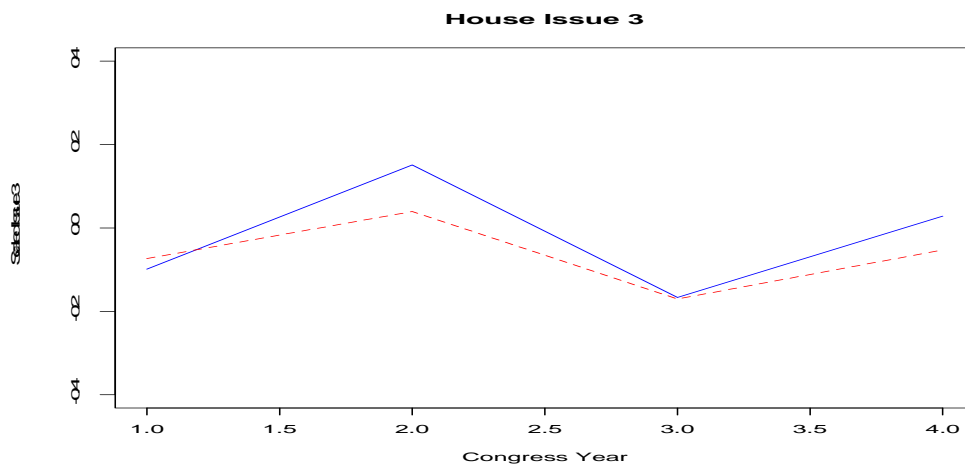
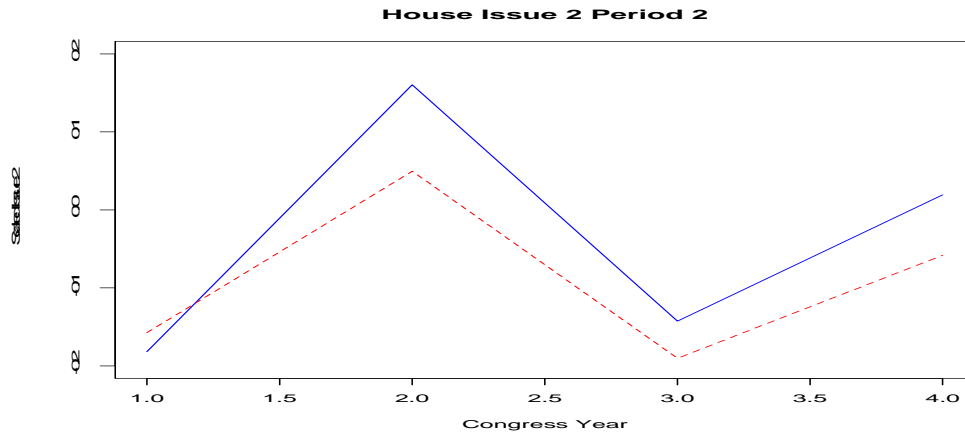


Figure 3: Ideal points in the House





Appendix

Description of Text Processing

The *Congressional Record* offers a two column, verbatim transcript of House and Senate floor debates and remarks, notice of bills, full texts of conference committee reports, and statements or documents submitted by members of Congress. The inaugural edition of the Record provided 5500 pages of material, covering the 43rd Congress. The volume of material is vast, opening the possibility to gaining significantly more leverage than is available in votes.

We employ automated text analysis techniques to simplify the challenge of analyzing such a rich data source. Other studies of congressional speech have found that supervised and unsupervised machine learning are both feasible and consistent with earlier research using traditional data sources, such as roll call votes.

Each speech originates on a page of the Congressional Record, as indexed and scanned by Proquest Congressional. Proquest makes available a Portable Document Format (PDF) copy of the pages of the record. Each page of the Record has been run through an optical character recognition (OCR) program, allowing Proquest users to search for specific language in the text. The text of these searchable PDFs are then extracted and saved as an unstructured text file format, retaining the order of the text. To identify the beginning and ending of congressional speeches, we used the presence of name of the Member of Congress, beginning with 'Mr.' or 'Mrs.,' followed by 2 or more all capital letters, such as "GRANT." We also allowed for certain exceptions for hyphens, generational titles such as Junior or Senior, and first names when available. First names, and in many cases, the state represented by the member, were indicated when two members with the same last name served contemporaneously. We corrected ambiguities using both, following Pool and Rosenthal's unique coding for each Congress.

This procedure, however, depends on the quality of the initial OCR and the initial text, and we found three systematic errors that limited its utility. The first was unrelated line breaks with a hyphen, common in two column text, separated many words. The consistency of the gaps in the original text enabled a simple solution: finding such hyphens and automatically eliminating the gap.

The second problem arose from the OCR software and the quality of the text. There are minor spelling errors in the names of the members of congress. This would mean a lack of a match between the Poole and Rosenthal vote data. To correct these errors, we used *Google Refine* text clustering. We grouped the data into congress-years, and then clustered Congress member names using Levenshtein distance functions, prediction by partial matching, and fingerprint key collision. The Levenshtein clustering method measures the minimum number of edits required to transform one string to another, and was applied to groups of six and later three

characters. Prediction by partial matching pairs six characters of two names and compares the length of the combination of characters in both strings to double the length of either individual names. Finally, the fingerprint key collision method removes leading and trailing whitespaces, converts all characters to lower case standardized ASCII notation, and matches on tokenized versions of each name. After each cluster is applied, we replaced all names in each cluster with a spelling drawn from the Poole and Rosenthal database.

Also, visual inspection of the output of the OCR process revealed that in many cases words would be combined into a single sentence, for example:

| “[theprotectivetariffisbad.](#)” Without some way to correct this error, whole speeches would have been lost.

| We resolved the word combination issue [issue](#) by writing a piece of software that split up combined words into their constituent whole word parts that are in a dictionary. While this algorithm works in a straightforward way for unambiguous cases “[theprotectivetariffisbad.](#)” other cases generate ambiguity over the number of words or the location of the split. To resolve the ambiguity, we use the Congressional Record to create a custom dictionary and weigh sub-words by the likelihood that each sub-word occurs elsewhere in the corpus. Thus in our speeches, we are much more likely to find the terms “public eyes” than “pub lice yes.” The output of this process is then substituted into the original texts.

After processing, each speech consists of paragraphs, sentences, tables, proclamations, and interruptions for applause. For the purposes of the analysis here, the population of speeches, or corpus, consists of all those continuous statements, drawn from the congressional record, on or around the same time as speeches on the tariff. Each speech can include several long editorials read verbatim from a newspaper, or they may end abruptly with an interruption by another member. As a result, it is necessary to make some assumptions about how much speech by a member is necessary to measure a position.

While speeches consist of words, in sentences, in paragraphs, we discard all word order information. The resulting *bag of words* is placed on a vector of word frequencies. By doing so, we assume that the order of the words does not matter for the content. Furthermore, reducing a sentence into a word frequencies generates a dataset that is as high dimensional as the vocabulary. This dimensionality can be reduced words by relying on the concepts behind individual words. We reduce the number of unique words in the dataset by replacing each word with its root or stem. Each stem is identified automatically, and then iteratively removed. The end result is a vector with a length equal to the total variety of words, with positive elements for words that appear in each speech.

Example of Data Counts

19th Century House Counts

	Efficiency	Managed trade	Redistribution
Dems1	1599	248	1318
Reps1	1183	248	873
South1	786	133	560
West1	316	31	301
Midwest1	1101	212	940
North1	634	125	416
Farms1	1348	241	1067
NoFarms1	1489	260	1150
Manufact1	1332	247	1010
NoManufac1	1505	254	1207
railroads1	1332	247	1010
Norailroads1	1505	254	1207

Membership Data

19th Century House and Senate Membership by Party and Region

	46 1879	47 1881	48 1883	49 1885	50 1887	51 1889	52 1891	53 1893	54 1895	55 1897	56 1899
House											
North											
D	80	73	129	110	95	93	163	138	28	53	83
R	131	149	116	135	145	171	87	131	242	201	189
South											
D	66	64	74	78	76	77	85	91	79	79	87
R	4	11	10	8	9	13	4	4	13	11	8
Senate	1879	1881	1883	1885	1887	1889	1891	1893	1895	1897	1899
North											
D	22	17	16	16	16	16	19	22	20	14	7
R	33	44	40	43	39	53	49	43	43	45	56
South											
D	23	21	20	23	21	22	26	26	20	24	21
R	2	1	0	2	1	0	0	1	1	1	1

20th Century House and Senate Membership by Party and Region

	79 1945	80 1947	81 1949	82 1951	83 1953	84 1955	85 1957
House							
North							
D	142	88	162	136	116	136	139

R	193	251	173	205	216	196	197
South							
D	108	106	105	104	102	99	101
R	2	2	3	2	6	7	7
Senate	1945	1947	1949	1951	1953	1955	1957
North							
D	40	23	38	29	28	28	28
R	42	51	47	48	56	47	48
South							
D	26	24	24	22	26	23	25
R	0	0	0	0	0	0	0

Vote Measurement

In order to provide a preliminary examination of the scaled texts, we collected a number of trade related roll call votes from the period. Each bill is coded as being either protectionist leaning or free trade leaning by whether the proportion of each party advocating for the bill surpassed a threshold:

A bill is characterized as follows:

- 1) The difference between the shares of votes from each party does not exceed 20 percentage points (Bipartisan).
- 2) The bill receives 100% of the Republican vote or 0% of the Democratic vote (P).
- 3) The bill receives 100% of the Democratic vote or 0% of the Republican vote (FT).
- 4) The bill receives more than 95% of the Republican vote or less than 5% of the Democratic vote (P).
- 5) The bill receives more than 80% of the Democratic vote or less than 20% of the Republican vote (FT).
- 6) The bill receives more than 80% of the Republican vote or less than 20% of the Democratic vote (P).
- 7) The bill receives more than 60% of the Democratic vote or less than 40% of the Republican vote (FT).
- 8) The bill receives more than 60% of the Republican vote or less than 40% of the Democratic vote (P)
- 9) NA

One example of a partisan free trade bill from the 19th Century is H.R. 561: “An Act to Reduce the Revenue and equalize Duties on Imports and for Other Purposes.” This bill, passed on July 8, 1892, received 196 Ayes, 188 of which were Democrats. No Republican voted in favor of the bill, but 28 abstained. Five Democrats voted nay. A 20th century example of a free trade bill is HR 1005, To Amend the Tariff Act of 1930 to Provide for Free Importation of Twine Used for Bailing Hay, Straw and Other Fodder and Bedding Material, passed on September 14, 1951. 81 Republicans joined 129 Democrats in passage. However, 35 Republicans voted nay, which was sufficient to prevent the bill from being classified as a bipartisan bill, despite the fact that the majority of the Republicans voted for the measure.

A protectionist example from the 19th century is a vote on whether “To Strike the Enacting Clause of H.R. 5893, A bill Reducing import duties and War Tariff Taxes.” In May 06, 1884, 111 Republicans voted for the measure, while only 4 defected. 40 Democrats voted in favor, 149 voted against. Similarly, a bill in the 20th Century, sponsored by Senator McCarthy of Wisconsin, required the President to establish import quotas on furs and fur articles as determined necessary by the tariff commission to protect the domestic-fur producing industry. The bill failed with 4 Republicans joining 43 Democrats voting nay.