Compensation or Consternation? : The Role Of International Competition in Domestic Trade Politics

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Abstract

Among the principle concerns of international political economy is the relationship between economic conditions to individual evaluations of policy choices and candidates. In trade politics, voters appear to behave sociotropically, in that they appear more responsive to outcomes of the region and nation over measures of individual material interests. We argue that this behavior is consistent with material voters imperfectly evaluating politicians on the basis of their efforts to redistribute commercial gains and in the match between their overall foreign policy orientation and their region and nation’s competitive position in the world. In this logic, assistance programs, such as those called for to embedded liberalism, have the disadvantage of sending a negative signal to voters about the prospects for their region and nation in a competitive environment. Using novel microdata from the US Department of Labor TAA program, we show that TAA can exacerbate the electoral effects of trade shocks, counterintuitively driving voters away from pro-distribution politicians and toward hawkish candidates.
1 Introduction

The domestic terrain of trade policy is populated with lobbyists of concentrated industries, representatives of labor, and government bureaucrats with sophisticated (if ideological) preferences over international trade. Trade policy outcomes depend on the interplay between these interest in international negotiation (Putnam, 1988). However, because trade can impose concentrated costs on segments of the mass public, periodic outbursts of popular sentiment can easily overwhelm the carefully negotiated balance of commercial interests. To insulate their carefully orchestrated deals from these domestic shocks, governments have sought to balance the advantages that accrue from international trade with re-distributive institutions, undercutting popular mobilization against liberalization. If successful, these institutions can help maintain embedded liberalism (Ruggie, 1982) domestically, this implies a compact between citizens and the state that ensures otherwise efficient policies are not so damaging in the short run or made at the expense of those left behind.\(^1\)

That compact has never been as successful as promised and multilateral trade negotiations across the world have stalled out. Rodrik (1998) warns that hyper-globalization generates social instability. Specifically, globalization has made it exceedingly difficult for governments to provide social insurance, one of their central functions that has helped maintain social cohesion for liberalization throughout the postwar period. Rudra (2008) pinpoints that the poorest societies have not benefited from the state welfare system from the beginning of globalization.

In addition to challenging the institutional problems and the design of multilateral institutions, scholars have begun to question the fundamental premise of embedded liberalism. Does support for open commercial policy follow from adjustments to the distributive effects

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\(^1\)Evidence for this account remains limited. One prominent study, Margalit (2011) finds that anti-incumbent effect of trade-related job losses is reduced when more government assistance is provided in that area. Internationally this has meant a commitment to a multilateral trade regime.
of trade? At the root of this question is whether the mass public values the material aspects of trade policy, and so would be sensitive to redistributive mechanisms. Surveys of the mass public have largely failed to demonstrate individual analogies to the sort of sophisticated economic reasoning typical of industry actors. Individuals misattribute their economic woes to trade and undervalue the benefits trade brings to competition and consumption. Furthermore, people do not appear to be motivated like a profit maximizing corporation, often failing to match trade policy to their alleged personal commercial interests.

Scholars have identified three sources of divergence between the predictions of standard economic models and expressions of preferences in surveys of the mass public. First, individuals may be divided between their identities as consumers or producers, workers at a particular company, an industry, or as a class (Alt and Gilligan, 1994; Dean, 2016). Second, the mass public may be motivated less by their personal interests and more by the needs of others, either because of in-group solidarity, out-group hostility, or altruism (Mansfield and Mutz, 2009). Third, even if these interests were straightforward, citizens may lack crucial information about the redistributive effects of trade, particularly as international trade has become more complex (Bauer, Pool and Dexter, 1963; Rho and Tomz, 2017; Guisinger, 2009). This may reinforce tendencies to evaluate commercial policy on the basis of its effects on the region or nation.

What unites each of these accounts is an emphasis on the within-country redistributive element of international trade and the divisions among winners and losers. However, nations and markets are embedded in a competitive international environment, and the medium-run fate of any individual’s economic interest depends on their region and nation’s place in that international environment. Even a relative winner from a trade policy may nonetheless rationally oppose liberalization if the policy undercuts national or regional competitiveness. If so, it would be important to distinguish patterns of public opinion consistent with sociotropic voting from concern about regional competitiveness.

We offer a novel framing of the problem of sociotropic voting that treats commercial
policy as part of the overall foreign policy evaluation of politicians. Here voters not only benefit from assistance programs, but learn from that assistance about their region and nations standing in the global economy. Politicians, in turn, may avoid giving too much assistance to the region hurt by an exogenous economic shock as it may exacerbate fear among voters. In contrast to psychological accounts of sociotropic behavior, we argue that voters have material stakes in the outcome of geopolitical competition, particularly in the context of the United States in its rivalry with China.

To offer support for this account, we focus on a long running and often maligned program in the United States, the Trade Adjustment Assistance (TAA) program. The TAA directly targets voters and it is tailored for compensating trade-related job losses, but also publicly identifies a foreign trading partner as responsible for those trade-related job losses. Using novel microdata from the Department of Labor, we deploy a novel identification strategy to identify communities that were more or less exposed to the TAA program on the basis of arbitrary assignment of TAA petitions to bureaucrats.

We apply our theory to changes in electoral support for US political parties from 2000 to 2008. Extending the logic of Autor et al. (2016), we find that exposure to trade produces support for the Republican Party. This support is lower in counties that receive TAA assistance, as hypothesized in theories of embedded liberalism. However, when treating TAA assistance as an interaction term, we find that the assistance exacerbates the effect of the China Shock on politics. In high China Shock counties, ten percent increase in predicted TAA petition certification leads the Republican party to gain more votes by 1.25%. We find a similar pattern in the causal mediation analysis. Strikingly, government assistance that is originally designed to assuage their anxiety aggravates their fear by providing more information that their counties are losing from trade with China, what we term a consternation effect.

This paper proceeds as follows. Section 2 connects commercial policy, and individual evaluations and preferences over commercial policy to broader considerations about national
standing and competitiveness. Section 3 shows that given this connection, otherwise pro-
assistance politicians may forgo assistance for fear of being replaced by a rival. Section 4
We then evaluate the causal effect of the China Shock and the role of the TAA in mediating
that effect.

2 What do we mean by sociotropic

2.1 Economic Sociotropism

Among the principle concerns of political economy is the relationship between economic
conditions to individual evaluations of policy choices and candidates. In the context of
voting, support for a candidate is widely held to depend on the economic performance
of the incumbent politician and her policies. Economic performance, however, is difficult
to directly observe. In that context, there is disagreement in the research about whether
individuals do or even should react more to their personal economic situation (ego-centric) or
to the national economy (sociotropic). Ego-centric evaluations of economic conditions do not
require citizens to be particularly sophisticated, but individual outcomes are noisy and are
only weakly informative of politician performance (Kinder and Kiewiet, 1981). Sociotropic
evaluations are mediated by national media accounts. They depend on the ways that the
economy affects others, but are more directly attributable to political choices. Survey data
show that vote choice is more strongly correlated with voter assessments of national economic
conditions than with assessments of personal economic conditions (Kiewiet, 1983; Kinder and
voters can do better than national economic conditions by relying on the outcome for groups
more similar to the voter (in their case people living in the same state).

The IPE scholarship on sociotropic preferences extends the concept of sociotropic judg-
ment to policy evaluations, particularly commercial policy and immigration policy. Unlike
in the voting case, these economic policies have well-understood distributive consequences.\textsuperscript{2} Individuals who are employed in import-competing sectors (Rodrik and Mayda, 2001), homeowners in import-competing regions (Scheve and Slaughter, 2001) are less likely to favor trade. Individuals favor trade more if they are informed with the distribitional consequences of international trade (Rho and Tomz, 2017).

We would expect division over the tariff across import competing interests and exporter interests, division over migration between low and high skilled workers. However, survey respondents do not appear to be report individual preferences in a way that is consistent with measures of their predicted economic interest. Hainmueller and Hiscox (2006), for instance, show that high skilled immigrants are preferred among respondents at all levels of education and income. From this, Mansfield and Mutz (2009) conclude that “There is little evidence that individuals form attitudes about trade based on how trade affects their income.” Rather, individuals policy evaluations appear to be governed by non-material forces, “a sense of cosmopolitanism and inclusion” that is, psychological commitments to a particular identity and moral perspective. This means how the US as a whole is affected by trade (Mansfield and Mutz, 2009) matters more over personal gains from trade. This perception appears as in-group favoritism based on national superiority (Mutz and Kim, 2017) and geographic attachment (Bisbee, N.d.). Sociotropism is often coupled with race politics. A white American living in racially diverse community is more likely to favor trade protections (Guisinger, 2017), though education alleviates this anti-trade preference through fostering cosmopolitanism (Hainmueller and Hiscox, 2006).

The conceptual division between pocketbook and sociotropic judgment remains under-theorized. In the context context of voting, there was never a presumption that because a judgment is sociotropic that it was necessarily non-material. Just as national or regional economic condition can be more informative as to material conditions than even individual

\textsuperscript{2}A well documented problem with the study of economic voting is that it makes predictions that are difficult to study in the cross-section. The economy is either good or bad.
outcomes, the effects of trade on a regional or nation can be more important from an individual pocketbook perspective than a change in trade policy toward ones’ own sector of employment. In other words, a perfectly material-driven individual can favor a sociotropic interest depending on how he defines economic performance from trade. In the following, we implicate this logic in a case where sociotropic judgments are natural, questions about foreign policy.

2.2 Trade policy as foreign policy

Trade policy has both a domestic distribution component and a foreign policy component, the latter pertaining to the strategic response of the state in its affairs with other state. Political scientists have long recognized that economic assessment affects voter’s perception of how large a role the United States should play in the world (Goldstein, 1985; Blainey, 1988; Pollins and Schweller, 1999). Kertzer (2018) notes that whereas international security environment only shapes foreign policy preference of knowledgable citizens, domestic economic conditions, because of their salience, shape foreign policy preference of all individuals. His finding hints that foreign policy preference to a certain extent is shaped by domestic economic assessments.

Foreign policy is often left to elites, but voters are periodically asked to evaluate the direction of foreign policy in their electoral choices. In the United States, the authority of the President in foreign policymaking is unrivaled, and foreign policy performance is a major determinant of individual . Voter’s security foreign policy preference, predominantly the preference on wars, affects his or her electoral decision (Page and Shapiro, 2010; Karol and Miguel, 2007; Berinsky, 2009). The mechanism raised by Berinsky (2009) are twofold; wars can serve as a performance issue for leaders, and fear and threat generated by wars electorally advantage a political party in power. Similarly, voters reelect or punish incumbent presidents according to regional economic performance they belong to (Jensen, Quinn and Weymouth, 2017; Autor et al., 2016). The question remains, how would people perceive foreign policy when they believe that they are threatened both in economic and security
In the following, we develop a stylized model of electoral competition in which voters are evaluating candidates on the basis of their commercial policy. We show that citizens in non-tradable sectors will nonetheless punish candidates for trade policies that harm their community.

3 Formal model of economic sociotropism in an international environment

Our model focuses on how voters learn about the fit between their regional competitiveness and their elected representatives. Here politicians are characterized both by a type, an overall foreign policy orientation, and an action that they can take to forestall negative outcomes. Politician orientation may either be liberal \( t = 0 \) or bellicose \( t = 1 \) which is known to the voter. What is unknown is the state of the world, particularly whether or not their community is threatened economically by some foreign rival. We will indicate the threat status of a community \( i \) with \( \tau_i \), \( \tau_i \in \{0, 1\} \).

Prior to an election, politicians can credibly announce the extent of an assistance program. This program, denoted \( a_i \in \{0, 1\} \), comes at cost \( c \), and can help economic communities handle economic threats. While this program could itself have electoral effects, here we merely assume that politicians are aligned with voter interests in that they would prefer to offer assistance following a shock.

The game begins with nature choosing the degree of threat from a foreign commercial rival. Observing this, the politician credibly proposes a level of assistance. The voters then may experience a trade shock \( y \in Y = \{0, 1\} \), where \( y = 1 \) represents a high negative shock, \( y = 0 \) corresponds to no shock. The probability of a shock is increasing in the degree of foreign threat to the region \( \tau_i \): \( P_s \equiv Pr(Y = 1|\tau_i = 1) > Pr(Y = 1|\tau_i = 0) \equiv P_n \). The voter then decides whether to elect the liberal politician (\( e=1 \)) or vote for bellicose candidate.
For the purposes of clarity, we specify the voter’s payoff function, but in practice, all that
will matter is their interest in matching the politician to the state of the world.

\[ u_V(a_i, t, y) = -y(\gamma - a_i) - c + I(\tau_i = t) \]

Here \( \gamma \) is the negative payoff to the shock. \( \delta \) is the weight the voter puts on matching
the state of the world with the politician.

The politician’s payoff function is:

\[ u_L(a_i, y, \tau_i) = B(e(a_i)) + A(a_i)y(\tau_i) \]

Politicians enjoy returns to office, so called ego-rents \( B(e) \), where \( B'(e) > 0 \). The politi-
cian also has aligned preferences with the voter regarding the benefit for adopting more
distributive policies after a shock, where \( A'(a_i) > 0 \). Crucially, the politician observes the
degree of foreign economic threat, and so can act in expectation of the shock. Call the prob-
ability of adopting the assistance after a shock \( Pr(a_i^*|\tau_i^* = 1) = P_{as} \). Furthermore define
the probability of offering the program to an unthreatened community \( P_{an} \). Conditional on
representing a threatened community, the politicians first order condition balances electoral
considerations and the direct value to compensation.

\[ B'(e) \frac{\partial P_e}{\partial P_{as}} + A'(a_i)P_s = 0 \]

The voter, upon observing \((a_i, y)\), forms beliefs about the international competitive
environment \( \beta \) and elects a liberal politician after a shock at rate \( P_e \):

\[ P_e = Pr(\tau_i^* = 0|y = 1, a_i^*) \]

Note that the only thing the voter is evaluating in this case is the probability that the
politician is fit for the environment, not the degree of assistance offered. Election depends only on the indirect effect of assistance through information.

3.1 Beliefs

We suppose that the voters have some prior $\omega \in (0, 1)$ that their community faces an economic threat. The posterior belief $\tau^*_i$ is calculated via Bayes’ Rule:

$$Pr(\tau^*_i = 0|y = 1, a^*_i) = \frac{Pr(y = 1, a^*_i|\tau^*_i = 0)(1 - \omega)}{Pr(y = 1, a^*_i|\tau^*_i = 0)(1 - \omega) + Pr(y = 1, a^*_i|\tau^*_i = 1)\omega}$$

Here the probability of a shock is conditionally independent from the assistance package, so

$$Pr(y = 1, a^*_i|\tau^*_i = 1) = P_s Pr(a^*_i|\tau^*_i = 1)$$
$$Pr(y = 1, a^*_i|\tau^*_i = 0) = P_n Pr(a^*_i|\tau^*_i = 0)$$

$$P_e = Pr(\tau^*_i = 0|y = 1, a^*_i) = \frac{P_n P_{an} (1 - \omega)}{P_n P_{an} (1 - \omega) + P_s P_{as}\omega}$$

$P_e$ clearly decreases with $P_{as}$, which means that the liberal politician is less likely to be elected if they signal the community is threatened.

$$\frac{\partial P_e}{\partial P_{as}} = -\frac{P_n P_s P_{an} (1 - \omega)\omega}{(P_n P_{an} (1 - \omega) + P_s P_{as}\omega)^2} < 0$$

There may be an interior solution at $P_{as}^*$ where

$$B'(e(a_i)) \frac{P_n P_{an} (1 - \omega)\omega}{(P_n P_{an} (1 - \omega) + P_s P_{as}\omega)^2} = A'(a_i)$$

and

$$B''(e(a_i))e'(a_i) + B'(e(a_i))e''(a_i) + A''(a_i) < 0$$
If the probability of the shock in an unthreatened communities is sufficiently low, the politician merely maximizes the joint interest $A(a_i)$. In addition, if a community unlikely to be threatened, (low $\omega$), the fact that the community can be informed with the shock decreases electoral returns and so would suppress assistance. The effect of assistance depends non-linearly on the other parameters. For instance, if the prior of the community is that they are under threat, the politician can easily alarm the community with even small amounts of assistance.

4 The causal effect of the China shock on voting outcomes

In this section we examine the causal effect of the China Shock on voting outcomes. We begin our analysis by replicating the ‘China Shock’ model in Autor et al. (2016) (hereinafter “ADHM China Shock Model”). They find that the sudden increase in China trade led the Republican party to gain more votes in the 2016 election over to the 2000 election. We evaluate the ADHM China Shock model with a different dependent variable, the Republican vote increase in the 2008 election over the 2000 election. Building on the ADHM China Shock model, we then determine whether government assistance programs suppressed the impact of China Shock on Republican vote share. After confirming the conditional effect of China Shock by government intervention, we conduct an instrumented causal mediation analysis to test whether government intervention mediated the China Shock.

4.1 ADHM China Shock Model

Autor et al. (2016) argue that labor markets with severe import competition with China led to a rise in Republican vote share. The identification strategy of correlating exogenous changes in import composition to electoral outcomes does not reveal the causal mechanism. They speculate that China shocks shifted the ideological composition of the House of Representatives in elections prior to 2016 (page 8), allowing the Trump Campaign to take advantage of
subsequent economic turmoil. Therefore, their finding does not give any prediction on the Republican vote share increase in any other presidential elections.

Following our model, we argue that voters may evaluate politicians both in terms of their performance and in terms of their alignment for particular states of affairs. Put it another way, voters may perceive the China Shock as local redistributive issue or as a lens to understand international affairs. If the former is right, voters would support a presidential candidate who advances more protectionist positions. If the latter is right, however, voters would support a presidential candidate who favors hawkish foreign policy.

Our dependent variable, the change in the Republican two-party vote share between 2000 and 2008 in each county, is chosen to disentangle a voter’s perception on the China Shock as a trade issue from an international issue. The two Republican presidential candidates of the year 2008 and 2016 are very different in their stance on trade policy. John McCain is an advocate of trade liberalization. He is the one who supported permanent normal trade relations with China in September 2000. He also said “NAFTA has had unambiguously positive impact on US” (Senate statement, March 1999). This is a stark contrast to Donald Trump who is not afraid of initiating trade war with China and recently renegotiated NAFTA to address interests of domestic protectionist industry. Nevertheless, the two presidential candidates are similar in their support on hawkish foreign policy. If the coefficient of our dependent variable is positive, this provides the evidence that voters recognize the China Shock as an international issue. If negative, however, voters recognize the China Shock as a trade issue.

The independent variable is the degree of China Shock on each county. We use the China Shock measure of Autor, Dorn and Hanson (2013) and Autor et al. (2016). This is measured as contemporaneous change in import exposure $\Delta IP^\text{cu}_{i\tau}$ in the commuting zone (CZ) $i$. $\tau$ is the period of import exposure calculation which is defined as 2000 – 2007. Formally, $\Delta IP^\text{cu}_{i\tau}$ can be written as:
\[ \Delta IP_{it}^{cu} = \sum_j \frac{L_{ijt}}{L_{it}} \Delta IP_{jt}^{cu} \]  

(1)

The fraction \( L_{ijt}/L_{it} \) is the share of industry \( j \) in the CZ \( i \) in the time period \( t \).\(^3\) This measure, however, is naive in a sense that it does not consider the demand shock. Rather than the supply shock, changes in tastes of Americans may have led to increase in imports from China.

To eliminate the omitted variable bias from the demand shock, we use an instrumental variable, also following Autor, Dorn and Hanson (2013) and the Autor et al. (2016). The instrumental variable is measured as the lagged contemporaneous changes in Chinese imports to eight other non-US high income countries. Formally, this instrument \( \Delta IP_{it}^{co} \) can be written as:

\[ \Delta IP_{it}^{co} = \sum_j \frac{L_{ijt-10}}{L_{uit-10}} \Delta IP_{jt}^{co} \]  

(2)

By instrumenting with \( \Delta IP_{it}^{co} \), we can measure the economic rise of China.

Weighted two stage least-square (2SLS) is the estimation strategy. Three kinds of controls are added—industry/occupation, demographic, and geographic controls. Industry/occupation and demographic controls are lagged for avoiding post-treatment. The industry/occupation controls include the share of manufacturing in commuting zone employment, the routine-task-intensity index, and the offshorability index. The demographic controls are the percentage of female employment, college educated, and foreign born. The geographic control is the census division of Northeast, South, West, and Midwest. Formally the estimation strategy can be represented as below:

\[ \Delta Y_{jt} = \gamma_d + \beta_1 \Delta IP_{jt}^{cu} + Z_{jt}'\beta_2 + e_{jt} \]  

(3)

\(^3\)To estimate the first difference of \( \tau \) being equal to 2000 – 2007, we calculate differences for the two periods 1990 to 2000 \((t = 0)\) and 2000 to 2007 \((t = 1)\) and include time dummies in the models.
\( \Delta Y_{jt} \) is the gains in the Republican vote share in 2008 in comparison to 2000 in county \( j \).

The above 2SLS model is weighted with the county-level total votes in the 2000 presidential election. The weighting is to recover individual-level estimate. The weighting also prevents overestimating impact of the China shock of small-size counties.

### 4.2 China shock with government assistance

Building on the ADHM model, we incorporate a measure of embedded liberalism as an interaction term with the China Shock variable. Here we measure the degree of embedded liberalism as the aggregated certification rate of Trade Adjustment Assistance (TAA) petitions by CZ. TAA is the longest-standing compensation scheme to unemployed workers who lost their jobs because of trade. Workers who believe they lost their jobs due to trade file petitions, and they get monetary compensation as well as job training from the government once their petitions are certified. We view the higher the certification rate, the more responsive the government is to its people. This measurement, compared to the the conventional TAA measurement in previous literature, is more adequate in quantifying government responsiveness. Whereas the previous measurements tend to focus on total dollar amount of compensation (Autor, Dorn and Hanson, 2013), we pay attention how the government timely fulfills compensation demands of its people. Formally, this empirical model can be represented as:

\[
\Delta Y_{jt} = \gamma_d + \beta_1 \Delta IP_{jt}^{cu} \cdot TAA_j + \beta_2 \Delta IP_{jt}^{cu} + \beta_3 TAA_j + Z'_{jt} \beta_4 + e_{jt} \tag{4}
\]

TAA, along with other government policies, is not free from the endogeneity. Both observed and unobserved variables drive certification of TAA petitions, and these variables can be correlated with Republican vote share (dependent variable). These variables thus have to be neutralized to estimate the effect of TAA certification on the Republican vote share increase without bias. To neutralize TAA certification, we bring in an instrumental
variable of TAA certifying officer leniency. Certifying officers are government bureaucrats who are in charge of certifying TAA petitions from workers. Their leniency is only correlated with the aggregated TAA certification rate by commuting zone (independent variable), but not with other variables including the Republican vote share.

TAA certifying officer leniency score is calculated as the mean predicted value of the TAA petition certifications in the community zone to which county \( j \) belongs during the year 2005 – 2007. We acquired the petition-level TAA data from Department of Labor through the Freedom of Information Act (FOIA) request. The dataset consists of detailed information about each petition, such as the date of petition registration and certification, petition outcome, address of the company which is subject to the petition, and the certifying officer which administered each case. To aggregate the certifying officer leniency score to the CZ level, we first regressed the petition outcome (dependent variable) to the certifying officer who was in charge of that petition (independent variable) to calculate the predicted TAA certification rate of each petition. As a second step, we calculated the mean predicted certification rate at the CZ-level. In this way, we can minimize the loss of its trait as an instrumental variable during the process of data aggregation. TAA petitions during the year 2000 – 2004 is excluded from the analysis because of the data availability and the time lag between the China Shock and subsequent unemployment.

The interaction term is composed of the China Shock variable and the predicted TAA certification rate. For intuitive understanding of the interaction term, we changed the China Shock and the China Shock instrument variables from continuous to binary. This means we created a dummy variable of CZs exposed to high and low China import exposure. Same for the instrument, we created a dummy variable of high and low non-US exposure. For example, CZs that have high employment share of industries that experienced rapid Chinese import to other industrialized countries are coded as CZs with high non-US exposure. We set the mean

\[ \text{The dataset acquired from the Department of Labor begins systematically recording information about certifying officer in 2005.} \]
value of the US exposure and the non-US exposure as the threshold value of the dummy transformation. Figure 1 is the map of CZs that are subject to both high US and non-US trade exposure. We can see that Midwest and Southeast regions are disproportionately hurt more by the China Shock compared to other regions.

Figure 1: Binary China Shock Map

4.3 Government Assistance as Instrumented Mediator

We adopt the methodology of Frölich and Huber (2017) (causalweight package) in conducting instrumented mediation analysis. Unlike other mediation models based on linear models and exogeneous treatment and mediator assumptions, this approach estimates non-parametric identification of causal direct and indirect effect. In this model, both treatment and mediator endogeneity are addressed with stronger assumption on monotonicity and ex-
ogeneity assumptions of the instruments.

\[
\begin{align*}
Y &= \varphi(D, M, X, U) \\
M &= \zeta(D, ZM, X, V) \\
D &= \mathbb{I}\{\chi(ZD, X, W) \geq 0\}
\end{align*}
\]

Outcome \(Y\) is the function of the treatment \((D)\), mediator \((M)\), and covariates \((X)\). Mediator \(M\) is the function of the treatment \((D)\), mediator instrument \((ZM)\) and covariates \((X)\). Treatment \((D)\) is the indicator function of treatment instrument \((ZD)\) and covariates \((X)\). \(U, V, W\) are the unobservables. (Figure 2) The function \textit{medlateweight} in the \texttt{causalweight} package weights the treatment and the mediator based on instrument propensity score.\(^5\) We are interested in measuring the following three effects:

1. The average effect of among compliers (LATE):

\[
\Delta = E[Y^1 - Y^0 \mid T = co] = E[Y^{1,M^1} - Y^{0,M^0} \mid T = co] \tag{5}
\]

2. The \textit{direct} effect among compliers:

\[
\theta(d) = E[Y^{1,M^d} - Y^{0,M^d} \mid T = co], \, d \in \{0, 1\} \tag{6}
\]

3. The \textit{indirect} effect among compliers:

\[
\sigma(d) = E[Y^{d,M^1} - Y^{d,M^0} \mid T = co], \, d \in \{0, 1\} \tag{7}
\]

The LATE in this context refers to the effect of the China Shock on the Republican vote share increase among complier counties. This can be decomposed into two effects, the direct

\(^5\)The weight by total votes in 2000 presidential election could not be included due to the way \textit{medlateweight} function is designed. The authors therefore acknowledge that this estimation strategy is exposed to the threat of over or under-representation of small counties over big counties.
and the indirect effect. The direct effect is the impact of the China Shock on the Republican vote share increase, which is what has been estimated in preceding analyses with different empirical models. The indirect effect is the impact of embedded liberalism (predicted TAA certification rate) in mediating the Republican vote share increase due to China Shock. Here, the high China Shock counties belong to the treated group, and the low China Shock counties belong to the control group.

Figure 2: Causal Diagram of the Instrumented Causal Mediation

4.4 Results

Table 1 shows the positive impact of the China shock on the Republican vote share increase. The China Shock coefficient is the smallest in the OLS model (model 1), but the coefficient becomes much larger in the 2SLS models in the column 2-5. After controlling for industry/occupation, demographic, and geographic characteristics of a county, one unit increase in China Shock increases the Republican vote share by 0.321% between the 2000 and 2008 presidential elections. This is consistent with Autor et al. (2016) which tested the impact of the China Shock on the Republican vote share increase between the 2000 and 2016 presidential elections. The positive regression coefficient of the China Shock variable confirms
that voters perceive the shock as an international issue rather than as a trade issue. The China Shock caused Americans to vote more for John McCain, who pushed for free trade yet hawkish foreign policy. The China Shock generated fear on America’s shaky standing in international relations, and this led voters to choose a candidate who promises to make America stronger in international relations.

Table 1: Exposure to Chinese Import Competition and Presidential Elections, 2008 vs. 2000

| Dependent variable: Change in Percentage of Two-Party Vote Obtained by GOP, 2008 (McCain) vs. 2000 (Bush) |
|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) |
| Δ Import_Penetration | 0.082* | 0.518*** | 0.834*** | 0.812*** | 0.321*** |
| (0.043) | (0.066) | (0.092) | (0.090) | (0.085) |
| Constant | −2.467*** | −2.962*** | −12.317*** | 9.335*** | 8.429*** |
| (0.109) | (0.124) | (1.269) | (1.681) | (1.747) |

Estimation | OLS | 2SLS | 2SLS | 2SLS | 2SLS |
2000 Ind/Occ Controls | No | No | Yes | Yes | Yes |
2000 Demography Controls | No | No | No | Yes | Yes |
Census Division Dummies | No | No | No | Yes | Yes |
Observations | 6,216 | 6,216 | 6,216 | 6,216 | 6,216 |
R² | 0.001 | −0.016 | 0.058 | 0.124 | 0.249 |
Adjusted R² | 0.0003 | −0.016 | 0.058 | 0.123 | 0.247 |
Residual Std. Error | 996 (df = 6213) | 1,004 (df = 6213) | 967 (df = 6210) | 933 (df = 6207) | 864 (df = 6204) |
F Statistic | 1.8 (df = 2; 6213) | 1.004 (df = 6213) | 967 (df = 6210) | 933 (df = 6207) | 864 (df = 6204) |

Note: *p<0.1; **p<0.05; ***p<0.01
N=3,108 counties, excluding counties in AK and HI

The role of embedded liberalism on the Republican vote share is exhibited in Table 2. Predicted TAA certification rate, the measurement of embedded liberalism, is added to the models of Table 1. All five models show that given constant level of China Shock, higher likelihood of certifying TAA petitions suppress the Republican vote share increase. After the controls on industry/occupation, demographic, and geographic characteristics of a county, one percent increase in predicted TAA certification rate decreases the Republican vote share by 0.232%. This coefficient size is big considering that it is equivalent to almost two thirds of the China shock coefficient (0.331%) in the same model. Embedded liberalism, without considering the county-level variation in the China Shock, suppresses the support for the Republican party by compensating the trade losers.

Interestingly, embedded liberalism affects county-level voting behavior differently by the degree of the China Shock. Figure 3 graphs the result of the 2SLS model with the interaction term between predicted TAA certification rate and binary China Shock variable (See
Table 2: Embedded Liberalism and Exposure to Chinese Import Competition, 2008 vs. 2000

<table>
<thead>
<tr>
<th>Dependent variable: Change in Percentage of Two-Party Vote Obtained by GOP, 2008 (McCain) vs. 2000 (Bush)</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Δ Import_Penetration</td>
<td>0.106**</td>
<td>0.544***</td>
<td>0.843***</td>
<td>0.848***</td>
<td>0.331***</td>
</tr>
<tr>
<td></td>
<td>(0.048)</td>
<td>(0.075)</td>
<td>(0.104)</td>
<td>(0.102)</td>
<td>(0.096)</td>
</tr>
<tr>
<td>Predicted TAA Certification</td>
<td>-0.266***</td>
<td>-0.266***</td>
<td>-0.160***</td>
<td>-0.168***</td>
<td>-0.232***</td>
</tr>
<tr>
<td></td>
<td>(0.045)</td>
<td>(0.046)</td>
<td>(0.045)</td>
<td>(0.043)</td>
<td>(0.040)</td>
</tr>
<tr>
<td>Constant</td>
<td>13.657***</td>
<td>13.990***</td>
<td>-1.756</td>
<td>20.590***</td>
<td>23.345***</td>
</tr>
<tr>
<td></td>
<td>(2.764)</td>
<td>(2.789)</td>
<td>(3.179)</td>
<td>(3.337)</td>
<td>(3.206)</td>
</tr>
</tbody>
</table>

Estimation:  OLS  2SLS  2SLS  2SLS  2SLS
2000 Ind/Occ Controls: No  No  Yes  Yes  Yes
2000 Demography Controls: No  No  No  Yes  Yes
Census Division Dummies: No  No  No  No  Yes
Observations: 4,808 4,808 4,808 4,808 4,808
R²: 0.008 0.009 0.056 0.119 0.253
Adjusted R²: 0.008 0.009 0.055 0.117 0.251
Residual Std. Error: 1,090 (df = 4804) 1,099 (df = 4804) 1,063 (df = 4801) 1,028 (df = 4798) 946 (df = 4795)
F Statistic: 13.13*** (df = 3; 4804)

Note: *p<0.1; **p<0.05; ***p<0.01
N=3,108 counties, excluding counties in AK and HI

Appendix for the regression table). In low China Shock counties, ten percent increase in TAA certification decreases the Republican vote share by 3.5%. On the other hand, in high China Shock counties, ten percent increase in predicted TAA petition certification leads the Republican party to gain more votes by 1.25%. This implies that when voters feel fear from an economic shock, government assistance that is originally designed to assuage their anxiety aggravates their fear by providing more information that their counties are losing from trade with China (consternation effect).

As a last step of the analysis, we examine embedded liberalism as a mediator of the China shock. Table 3 is the result of the instrumented causal mediation analysis with 500 times of simulation. The Local Average Treatment Effect (LATE) is the average treatment effect of the complier group (i.e. groups of counties that get shocked due to increased trade with China and otherwise not get shocked). Direct effects of the China Shock on the Republican vote share increase are introduced in the second and the third columns. The fourth and the fifth columns show the indirect effects of the China Shock that is mediated by the predicted TAA certification rate.

The LATE coefficient of 3.037 with the p-value approximating to 0 means that the high China-shock counties vote for the Republican party more by 3.037% over low China-shock counties during 2000 – 2008 presidential elections. Considering the p-values, note that the
Figure 3: Heterogeneous Effects of Embedded Liberalism

Table 3: Instrumented Causal Mediation Analysis

<table>
<thead>
<tr>
<th></th>
<th>LATE</th>
<th>dir.treat</th>
<th>dir.control</th>
<th>indir.treat</th>
<th>indir.control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect</td>
<td>3.037</td>
<td>3.438</td>
<td>1.908</td>
<td>1.128</td>
<td>-0.401</td>
</tr>
<tr>
<td>SE</td>
<td>0.306</td>
<td>4.565</td>
<td>0.627</td>
<td>0.577</td>
<td>4.575</td>
</tr>
<tr>
<td>p-value</td>
<td>0</td>
<td>0.451</td>
<td>0.002</td>
<td>0.050</td>
<td>0.930</td>
</tr>
</tbody>
</table>
LATE is predominantly driven by the direct effect of the control group (column 3) and the indirect effect of the treatment group (column 4). Interpreting the former effect, the low-China Shock counties would have voted for the Republican party more by 1.908% if they have faced high China Shock. The latter effect means that the counties that are highly likely to get TAA benefits due to high China Shock would increase its support for the Republican party by 1.128%. When the China Shock is mediated with embedded liberalism, we find the consternation effect in the semi-parametric estimation. When counties experience the high-level China Shock, high likelihood of TAA petition certification no longer appeases the constituency. Instead, the information that trade with China hurts its local economy leads the constituency to vote for the Republican party.

5 Conclusion

The logic of this paper follows from a straightforward accountability and selection mechanism. Voters seek different kinds of politicians when they perceive their community is threatened. With the formal model, we show politicians would prefer to respond to this electoral incentive by forgoing assistance policies which would help both the politician and the voter, but also signal that their economies are in trouble. Empirically, we show that the support of a Republican presidential candidate who promised hawkish foreign policy (John McCain) increased in counties with higher China Shock. The government assistance program (TAA) suppressed this pattern during the China Shock, but only conditional on counties that are not hurt by the China Shock. Counties that are hurt by the China Shock ended up voting more for the hawkish foreign policy presidential candidate.

This study goes part of the way to explain a long standing question in American politics and IPE more generally: why have US efforts toward embedded liberalism been so limited, and why do voters turn toward Republicans following trade shocks? We argue that both results follow once we re-conceptualize trade policy as foreign policy. An exogenous economic
shock makes voters feel insecure, and this insecurity leads voters to choose a politician who promise bellicose foreign policy. Otherwise pro-distributive politicians would, for fear of electoral punishment, hesitate to adopt policies that would do more to produce consternation in among voters.

Our notion of foreign policy as overriding parochial concerns induces sociotropic behavior on the part of voters. Rather than a psychological response, however, here is it is a reasonable reaction to the informational content of policy proposals. As Guisinger puts it, “Activist foreign policy attitudes, a positive attitude toward out-groups, and a preference for open trade, however, all reflect a sense of cosmopolitanism and inclusion” (Guisinger, 2017). However, this behavior need not have anything to do with an individual’s psychological worldview. The reason that a belief that the US should play a role in preventing human rights abuses has to do with trade is that both are foreign policy decisions that have, at their root, concerns over international competition, the relative safety of the nation, and the prospects of the survival and flourishing of its people and values. Trade policy is foreign policy.
## 6 Appendix

### Table 4: Summary Statistics, N=4,808

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Mean</th>
<th>St. Dev.</th>
<th>Min</th>
<th>Pctl(25)</th>
<th>Median</th>
<th>Pctl(75)</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOP_pct_2008</td>
<td>56.849</td>
<td>13.827</td>
<td>6.500</td>
<td>47.748</td>
<td>57.210</td>
<td>66.900</td>
<td>92.640</td>
</tr>
<tr>
<td>GOP_pct_2000</td>
<td>56.949</td>
<td>11.965</td>
<td>8.900</td>
<td>49.500</td>
<td>57.100</td>
<td>64.900</td>
<td>92.500</td>
</tr>
<tr>
<td>ΔUS-ChinaTrade_pw</td>
<td>2.024</td>
<td>2.372</td>
<td>−0.629</td>
<td>0.622</td>
<td>1.334</td>
<td>2.608</td>
<td>43.085</td>
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<tr>
<td>ΔLagged_OtherTrade_pw</td>
<td>1.869</td>
<td>1.929</td>
<td>−0.723</td>
<td>0.585</td>
<td>1.289</td>
<td>2.601</td>
<td>28.655</td>
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<tr>
<td>Binary_US-ChinaTrade</td>
<td>0.351</td>
<td>0.477</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
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<tr>
<td>Binary_OtherTrade</td>
<td>0.381</td>
<td>0.486</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Lagged_Share_Routine</td>
<td>29.472</td>
<td>3.087</td>
<td>19.992</td>
<td>27.402</td>
<td>29.463</td>
<td>31.891</td>
<td>37.748</td>
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<tr>
<td>Lagged_Offshorability</td>
<td>−0.401</td>
<td>0.467</td>
<td>−1.636</td>
<td>−0.747</td>
<td>−0.436</td>
<td>−0.105</td>
<td>1.240</td>
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<td>Lagged_Share_Female_Employed</td>
<td>63.175</td>
<td>6.824</td>
<td>33.243</td>
<td>58.933</td>
<td>63.507</td>
<td>67.880</td>
<td>79.606</td>
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<td>Lagged_Share_College_Population</td>
<td>45.817</td>
<td>9.224</td>
<td>19.944</td>
<td>39.354</td>
<td>46.181</td>
<td>52.739</td>
<td>70.555</td>
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<tr>
<td>Lagged_Share_ForeignBorn</td>
<td>5.078</td>
<td>5.812</td>
<td>0.385</td>
<td>1.774</td>
<td>3.179</td>
<td>5.907</td>
<td>48.908</td>
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<td>Midwest</td>
<td>0.341</td>
<td>0.474</td>
<td>0</td>
<td>0</td>
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<td>1</td>
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<tr>
<td>Northeast</td>
<td>0.070</td>
<td>0.256</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
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</tr>
<tr>
<td>South</td>
<td>0.455</td>
<td>0.498</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>West</td>
<td>0.134</td>
<td>0.340</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Predicted_TAA_Certification</td>
<td>60.844</td>
<td>2.560</td>
<td>55.045</td>
<td>59.406</td>
<td>61.012</td>
<td>61.923</td>
<td>67.082</td>
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<tr>
<td>Actual_TAA_Certification</td>
<td>63.651</td>
<td>24.728</td>
<td>0.000</td>
<td>50.000</td>
<td>63.636</td>
<td>80.000</td>
<td>100.000</td>
</tr>
<tr>
<td>Total_TAA_Petitions</td>
<td>19.408</td>
<td>33.832</td>
<td>1.000</td>
<td>3.000</td>
<td>8.000</td>
<td>18.000</td>
<td>265.000</td>
</tr>
</tbody>
</table>

### Table 5: Heterogeneous Effect of Embedded Liberalism on Counties with High and Low China Shock

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Change in GOP Vote Share, 2008 (McCain) vs. 2000 (Bush)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High China Shock</td>
<td>−27.456***</td>
</tr>
<tr>
<td></td>
<td>(9.852)</td>
</tr>
<tr>
<td>Predicted TAA Certification</td>
<td>−0.353***</td>
</tr>
<tr>
<td></td>
<td>(0.054)</td>
</tr>
<tr>
<td>High China Shock*Predicted TAA Certification</td>
<td>0.478***</td>
</tr>
<tr>
<td></td>
<td>(0.162)</td>
</tr>
<tr>
<td>Constant</td>
<td>33.774***</td>
</tr>
<tr>
<td></td>
<td>(4.055)</td>
</tr>
</tbody>
</table>

Estimation: 2SLS

2000 Ind/Occ Controls: Yes
2000 Demography Controls: Yes
Census Division Dummies: Yes

Observations: 4,808
R²: 0.239
Adjusted R²: 0.237
Residual Std. Error: 955.167 (df = 4794)

Note: *p<0.1; **p<0.05; ***p<0.01
N=3,108 counties, excluding counties in AK and HI
References


Rodrik, Dani and Anna Maria Mayda. 2001. Why are some people (and countries) more protectionist than others? National Bureau of Economic Research.

