

**Feelings First:  
Non-Material Factors as Moderators of Economic Self-Interest Effects  
on Trade Preferences<sup>1</sup>**

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## **Abstract**

A central debate in the study of public opinion toward international trade pits material self-interest against symbolic, non-material factors (e.g., nationalism, ethnocentrism, etc.) as sources of trade preferences. This paper advances a theoretical framework grounded in psychology that accounts for both material and non-material sources of trade opinion and, importantly, specifies the relationship between the two. I predict that the effect of self-interest is not uniform across individuals, but rather, conditional upon the strength (whether positive or negative) of symbolic predispositions—in this case, an individual’s attitude toward foreign cultural influences. I test this proposition using data from an original survey of over four thousand American workers. My key finding is strong and striking: industry-based, material self-interest is a “second order” consideration that acquires salience only when symbolic predispositions are weak. Symbolic sources of trade preferences, on the other hand, are primary “first order” factors that can altogether trump the contribution of economic self-interest to an individual’s stance trade. Put differently, I show that non-material factors define the scope conditions for longstanding models of trade opinion based on material self-interest.

## **1. Introduction**

What explains individual attitudes toward trade policy? Studies of public opinion toward international trade have identified a wide array of factors—both material and non-material—as sources of individual trade preferences (e.g., Baker 2005; Beaulieu 2002; Dong et al. 2013; Ehrlich and Maestas 2010; Guisinger 2013; Hainmueller and Hiscox 2006; Jamal and Milner 2013; Kaltenthaler et al. 2004; Kaltenthaler and Miller 2013; Lindsey and Lake 2013; Lu et al. 2012; Mansfield and Mutz 2009; Mansfield et al. 2015; Margalit 2012; Mayda and Rodrik 2005; Naoi and Kume 2011; O'Rourke and Sinnott 2001; Rankin 2001; Rathbun Forthcoming; Scheve and Slaughter 2001). Most of these factors, however, can be grouped into two broad categories. The first follows from conventional models of political economy and includes objective indicators of material self-interest with respect to trade, such as an individual's skill level or industry of employment (Alt et al. 1996). The second category comprises a cluster of non-material attitudes that reflect symbolic predispositions, and more specifically, attitudes toward out-groups (e.g., nationalism, ethnocentrism, generalized prejudice, cosmopolitanism, etc.). Taken collectively, existing studies of survey data have shown that both material and symbolic factors affect trade preferences, with some arguing, more radically, that material self-interest plays no role in shaping attitudes toward trade (Dong et al. 2013; Mansfield and Mutz 2009). Indeed, one of the central debates in the extant literature—and in international political economy (IPE) more broadly—pits these two categories of variables against one another as sources of public opinion (Fordham and Kleinberg 2012).

Studies of trade opinion generally take a uniform approach to this debate: they focus on the average individual and report how much or how little economic and non-economic factors

affect preferences over trade. The micro-foundations of preference formation—the particular role of these two types of factors, and their relationship to one another—have not yet been theorized or investigated empirically. This paper takes a substantial step in that direction. I build a theoretical framework informed by psychology to illuminate, and ultimately break, the dichotomous “material versus non-material” debate that has come to characterize this area of study.

Using new data from a survey of over four thousand American workers and focusing on industry of employment as an indicator of objective material self-interest, I demonstrate that sentiment toward foreign cultural influences—a symbolic, non-material factor—enjoys priority over economic self-interest in the formation of public opinion toward international trade. I do not simply argue that these cultural attitudes are a stronger predictor of individual trade preferences relative to sector of employment. Rather, I show that the strength of one's symbolic attitudes *conditions the effect* of the conventional economic variable. Specifically, only when attitudes toward foreign cultural influences are weak or neutral<sup>2</sup> do the considerations of material self-interest associated with industry of employment have any effect on trade opinion. When such attitudes are strong in either direction, whether positive or negative—i.e., when an individual deviates from a neutral position on the symbolic attitudinal scale—the effect of economic self-interest fades completely.

The implications of this finding are striking: symbolic attitudes and industry effects do not reinforce or counterbalance each other in this context; rather, material self-interest is a

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<sup>2</sup> In this paper, the terms “weak” and “neutral” are both used to characterize the symbolic attitudes of an individual who, on a given attitudinal scale, does not feel particularly strongly in either direction. This characterization is defined more precisely in my discussion of the data below.

“second order” consideration that acquires salience only when strong sentiments toward foreign cultural influences are lacking. Consistent with theories of preference formation in psychology, my findings suggest that symbolic attitudes enjoy a higher level of priority in the formation of trade preferences: they are “first order” factors that can altogether trump the contribution of economic self-interest to an individual's position on international trade. Put differently, I show that non-material factors *define the scope conditions* for longstanding models of trade preferences based on rational economic self-interest.

The remainder of this paper will proceed as follows. I begin by presenting the theoretical foundation of my argument, building upon the notion of heuristic judgment from behavioral economics and the theory of symbolic politics from political psychology. I advance a theoretical framework that accounts for both material and symbolic factors, and importantly, specifies the relationship between the two. In Section 3, I turn to the data and describe the dependent and independent variables of interest in this study. Section 4 presents the results of my statistical analysis. First, I follow the approach prevalent among existing studies of public opinion in IPE and analyze the sample as a whole. I show that, while attitudes toward foreign cultural influences are generally stronger predictors of individual trade preferences, objective material self-interest, captured by industry of employment, matters greatly as well. Second, I turn to the heart of my argument: I use split sample and interaction analysis to establish the priority of cultural attitudes over industry-based economic considerations in the formation of trade preferences. Section 5 considers the robustness of my findings, while Section 6 concludes.

## **2. From Affect to Opinion: Trade Preferences and the Theory of Symbolic Politics**

Rationality, as a cognitive process, can be very demanding. As research in psychology indicates, the mind relies on shortcuts wherever possible to avoid the effortful mental work of conscious

and deliberate reasoning. This idea is famously articulated by Daniel Kahneman and Amos Tversky, who argued in their Nobel prize-winning work that individuals use “heuristics”<sup>3</sup> to simplify complex decisions into quick, intuitive judgments (Tversky and Kahneman 1974). Such heuristics are not consciously chosen. Rather, they are part of a “mental shotgun” whereby the mind instinctively evades the demanding work of complex reasoning by substituting an easier question for a difficult one—typically without noticing the substitution (Kahneman 2011).<sup>4</sup>

One of the most commonly used intuitive heuristics in decision making involves reliance on emotion or *affect* (Kahneman 2011).<sup>5</sup> The notion of affective judgment was introduced into the heuristics lexicon by psychologist Paul Slovic as an *affect heuristic* (Slovic et al. 2002). Building on the work of Kahneman and Tversky, Slovic observed a process of decision making in which judgments are guided directly by reflexive “gut feelings” of liking and disliking, without deliberation or reasoning. The affect heuristic, in other words, is an instance of substitution where the answer to an easy question (How do I *feel* about it?) serves subconsciously as an answer to a much harder question (What do I *think* about it?).

The world of politics is not immune to the shortcuts of the human mind. In the realm of political preference formation, the notion of judgment through affective response finds prominent expression in the theory of symbolic politics. According to this theory, political judgments are driven by a set of broad “symbolic” attitudes—predispositions such as prejudice, nationalism, party identification, and political ideology—which are acquired early in life and

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<sup>3</sup> The technical definition of heuristic is “a simple procedure that helps find adequate, though often imperfect, answers to difficult questions” (Kahneman 2011).

<sup>4</sup> Conceived more generally, this approach to rationality in fact precedes Kahneman and Tversky. For example, Walter Lippmann suggested in 1922 that individuals rely on “stereotypes” as mental shortcuts (Lippmann 1922).

<sup>5</sup> I follow Neuman et al. (2007) and use the terms “emotion” and “affect” interchangeably.

remain highly stable throughout (Sears et al. 1979; Sears et al. 1980; Lau and Heldman 2009).<sup>6</sup> Importantly, symbolic attitudes drive political preferences by way of the affective shortcuts discussed above. As an individual is confronted with a new or unfamiliar policy issue, the symbols associated with the new “attitude object” evoke an automatic, affective response based on the person’s longstanding symbolic predispositions. Put differently, the cognitive association between the policy issue and the relevant symbolic attitude forges an affective shortcut, effectively bypassing other considerations, such as those associated with self-interest.

Empirical studies of American public opinion have consistently found symbolic predispositions to be very strong predictors of individual policy preferences—much stronger predictors, in fact, than short-term, tangible self-interest. The importance of symbolic beliefs, furthermore, is apparent in a wide variety of policy areas: from unemployment and economic redistribution policies, to healthcare, to criminal justice and public safety, to support for the Vietnam War, to busing for school integration (Lau et al. 1978; Lau and Heldman 2009; Sears et al. 1980; Tesler 2012). For instance, Lau and Heldman show that, over multiple decades, public support for a policy of guaranteed jobs and income is driven much more heavily by political ideology than by relevant measures of self-interest, such as employment status or financial well-being (Lau and Heldman 2009). In a more recent example, Tesler finds that racial attitudes are a key driver of public opinion toward health care reform policy in the United States (Tesler 2012). The policy—widely known as “Obamacare”—is closely associated with an African American President, and thus, as a policy issue, it evokes a strong, automatic, and emotional response rooted in attitudes toward race. In each case, individual preferences toward political issues are “formed mainly in congruence with longstanding values about society and the polity, rather than

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<sup>6</sup> The terms “symbolic attitudes” and “symbolic predispositions” are also used interchangeably in this paper.

short-term instrumentalities for the satisfaction of one's current private needs" (Sears et al. 1980, p.671).

My claim is that, for the majority of individuals, international trade is no exception. Like all political issues, trade is associated with symbols that correspond directly to longstanding symbolic attitudes, triggering an automatic affective shortcut. Most notably, international trade represents a transaction with a "foreign other." Thus, it should evoke a gut-level response based on general, stable, and early learned predispositions such as attitudes toward out-groups or foreignness. To put it in the language of heuristics, the difficult and complex question—"What do I think about trade?"—is displaced by the much easier question: "How do I feel about it?"

One might wonder whether these particular symbolic predispositions—individual-level factors such as prejudice, nationalism, and cosmopolitanism—are indeed the most relevant (and therefore dominant) predispositions with respect to trade preferences. The crucial factor, of course, is the similarity between the symbols posed by the policy issue, on the one hand, and those of the longstanding symbolic attitudes, on the other (Sears et al. 1980). In the context of international trade, symbolic predispositions that reflect attitudes toward out-groups or foreignness are certainly very strong contenders *a priori*. But foreign economic trade is not only *foreign*—it is also *economic*. To that extent, symbolic predispositions related to government intervention in the economy (e.g., liberal or conservative ideology, party identity) are also potential candidates. Ultimately, this is an empirical question.

Recent observational studies of trade opinion suggest that factors such as ideology and party identification have little consistent relationship with trade preferences.<sup>7</sup> In contrast, early learned symbolic predispositions such as generalized prejudice, nationalism, and

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<sup>7</sup> Public polling also increasingly reflects this trend. For example, see Gallup 2015.



cosmopolitanism are very strong predictors, often predicting trade preferences much more powerfully than measures of economic self-interest (Dong et al. 2013; Mansfield and Mutz 2009; Margalit 2012; Mayda and Rodrik 2005; O'Rourke and Sinnott 2001; Rankin 2001). Recent experimental work further suggests that preferences in this policy domain are products of gut-level judgments guided by out-group attitudes. For example, among Americans with negative attitudes toward out-groups, cultural distance from trading partners (even when very subtly implied) more than doubles protectionism, holding economic and security factors constant (Sabet 2014).

I have argued thus far that in the arena of mass politics, including in the domain of mass trade politics, strong symbolic predispositions make possible the cognitive shortcut of judgment via affect: when the relevant predispositions are sufficiently strong, the gut feelings evoked by the policy issue direct preferences, making a more demanding cognitive process unnecessary. Importantly, symbolic attitudes evoke responses which are *spontaneous* rather than deliberate, *automatic* rather than intentional or voluntary, and of course, highly *affective* rather than cognitive (Sears 1993). They are, in other words, “primary” and “basic,” independent of prior cognitive appraisals (Sears 1993; Zajonc 1980). According to a model of trade preferences informed by psychology, then, symbolic predispositions enjoy a position of priority. Among those with strong symbolic attitudes toward foreignness (i.e., those most likely to react with an automatic, emotional response to the political issue of international trade), preferences should be unaffected by the rational calculus of self-interest. When the relevant predispositions are strong, the symbolic meaning of international trade as a political attitude object evokes an emotional, gut-level response that renders a cognitive appraisal unnecessary. In other words, an affect heuristic is readily available and the simplifying substitution is made.

But what if the relevant symbolic predispositions are not strong at all? What about individuals who, on a given symbolic attitudinal scale, do not feel particularly strongly in either direction? In other words, what if the affect heuristic is *not* readily available? While such “neutrality” is a real, and indeed, empirically observable possibility, its implications for political preference formation have not been explicitly considered by political psychologists. I argue here that when strong symbolic predispositions are lacking—that is, when a simplifying affective shortcut is absent—the mind has no choice but to revert to the more effortful mental work of rational deliberation. Put differently, under a particular set of circumstances, rational considerations come heavily back into play.

While not explicitly presented or tested elsewhere, this proposition is at least preliminarily reflected in empirical studies of political behavior. In a recent study of racial predispositions and vote choice in the 2008 American presidential election, for example, Tesler and Sears conclude that unlike racial liberals and racial conservatives, racial “moderates”—those who are neither especially sympathetic nor especially unsympathetic toward blacks—voted according to the prevailing short-term forces of the election year (e.g., an evaluation of economic conditions, disapproval of Bush's Iraq policy) and thus, helped offset Obama's poor performance among racial conservatives (2009).

The implication for attitudes toward international trade is clear: rational considerations should affect only those who are neither cultural xenophobes nor cosmopolitans. In the context of trade opinion, I take these rational considerations simply to mean considerations of “objective” economic self-interest derived from political economy models of trade—whether these considerations be based on skill level, industry of employment, or something else. The emphasis in this paper is on industry-based material self-interest, but this focus is due to practical

and empirical reasons, not theoretical ones.<sup>8</sup> My theory does not adjudicate between rational models of trade preferences and, to the extent that each is valid, each should be subject to the dynamics argued for here. My central prediction is thus a comprehensive one: only when symbolic attitudes are weak or neutral do I expect to observe economic self-interest effects on individual trade preferences.<sup>9</sup>

Note that this argument represents not only an application of the theory of symbolic politics, but also an extension of it. My aim is not simply to reiterate that the effect of material self-interest is dominated by that of symbolic attitudes in terms of *relative magnitudes*. Rather, I am positing a *relationship of priority*: I predict that symbolic factors define the scope conditions for longstanding models of trade preferences based on rational economic self-interest.

### **3. Data**

The data I use in this study comes from a survey administered by the Harvard Globalization Survey (HGS) Project to measure attitudes toward global economic integration among a sample of over four thousand U.S. workers from selected industries. The survey design followed a customized two-stage sampling approach in which first, a set of twelve key industries (five in manufacturing, the rest in services) were identified based on a number criteria reflecting variation in exposure to the impacts of globalization (i.e., factor intensity, value-added per

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<sup>8</sup> I discuss these reasons more fully below.

<sup>9</sup> Although the theory I present here is novel in its application to international political economy at the micro level, a similar argument is made at the macro level by Rawi Abdelal in his study of economic policy in three post-Soviet states (2001). Interestingly, Abdelal argues that in the absence of a strong national identity (i.e., when the national identity of a society is ambiguous and ambivalent), governments are likely to respond to short-term material incentives, falling back on the pursuit of economic goals such as the maximization of societal wealth and economic consumption. When national identity is strong and uncontested, on the other hand, a country's economic policy is defined and directly guided by social purpose, with economic goals linked to the protection and cultivation of the nation.

worker, trade balance, exposure to offshoring activity, dependence on immigrant labor, and total employment). The twelve industries included in the sample were chosen to provide suitably wide variation along these dimensions of interest and to cover the whole range of industries along them.<sup>10</sup> Once the targeted industries were identified, a sizeable sample of currently employed, native workers was recruited from each. The sample sizes obtained for each sector are roughly proportional to the size of that industry. The survey was fielded online by YouGov/Polimetrix between September 2010 and February 2011.

### *3.1 Dependent Variables*

As measures of individual attitudes toward international trade, I rely on responses to three separate questions on the HGS survey:

*We would like to learn about your views on trade with other countries - by trade we mean American business and individuals buying goods from other countries or selling goods to other countries.*

- 1. Do you think that restrictions on buying goods made in other countries should be increased, decreased, or kept at the current level?*
- 2. Do you think that trade with other countries is good or bad for you and your family?*
- 3. Do you think that trade with other countries is good or bad for the United States as a whole?*

In the case of the first question, response options reflect a five-point scale ranging from “Increase greatly” to “Decrease greatly.” I use responses to this item to code the first of my dependent variables, a binary indicator of protectionism which takes a value of 1 for respondents

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<sup>10</sup> The manufacturing industries include: food manufacturing, chemical manufacturing, computer and electronic product manufacturing, transportation equipment manufacturing, and fabricated metal product manufacturing. The service industries are: construction, telecommunications, educational services, ambulatory health care services, nursing and residential care, financial services, and internet and data processing services.

who think that restrictions on trade should be greatly or somewhat increased, and 0 otherwise. Answer categories for the second two questions also span a five-point scale, this time ranging from “Very good” to “Very bad.” I construct two further binary dependent variables, each corresponding to one of these two questions. These indicators take a value of 1 for respondents who believe trade is very bad or somewhat bad for themselves (or the United States), and 0 otherwise.

The dependent variables in this analysis, therefore, are binary measures of (I) support for restrictions on buying goods made in other countries (*Tariff Support*), (II) the perception of trade's impact (good or bad) on one's self and family (*Bad Self Impact*), and (III) the perception of trade's impact (good or bad) on the United States as a whole (*Bad US Impact*). Notice that only the first of these variables is based on a direct measure of individual attitudes toward trade *policy*. The second two variables reflect individual beliefs about trade's personal or country-level impact. While I am ultimately interested in preferences toward policy, I believe that treating such beliefs as dependent variables is useful in the context of this study for at least two reasons. First, and most importantly, beliefs about trade's personal and country-level impacts are very strongly associated with individual policy preferences, both in this data and in surveys of trade opinion (Mansfield and Mutz 2009; Fordham and Kleinberg 2012). Thus, the factors driving these beliefs are also very likely to be indirectly affecting opinion toward trade policy. Second, one could reasonably suggest that where perceptions of trade's impact on self and family are concerned, considerations of material self-interest should play a particularly strong role. Treating perceptions of personal impact as a dependent variable, therefore, sets up a particularly difficult test for the role and effect of non-material factors in the process of trade preference formation.

### 3.2 Independent Variables

The HGS survey provides an especially good measure of anti-foreign sentiment with the following question:

*People have different views on whether exposure to cultural influence from other countries is positive or negative for American society. In your view, what is the impact of foreign cultural influences on American society?*

This question offered respondents five answer categories, ranging from “Very positive” to “Very negative.”<sup>11</sup>

The instrument used by the HGS survey to gauge pro- or anti-foreign sentiment is ideally suited to the aims of this paper. First, and most importantly, respondents have the option of expressing a weak or neutral stance toward foreign cultural influences: in response to the above question, individuals can answer “Neither positive nor negative,” indicating a moderate position on this attitudinal scale. Second, notice that the question is concerned with cultural foreign influences; it says nothing about economic or even political interaction with foreigners. In an open-ended follow-up question, respondents who attributed a negative impact to foreign cultural influences were asked to specify the cultural threats with which they are concerned. Not a single respondent voiced economic or economic-related concerns.

Finally, unlike some other indicators of symbolic or identity-related attitudes which have been employed in studies of trade preferences, the HGS measure reflects a more realistic conception of identity by allowing cosmopolitan attitudes to coexist with a modest level of national or in-group pride. Consider, for instance, a measure of nationalism that asks respondents

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<sup>11</sup> This question on the influence of foreign cultures was separated in this survey from the (preceding) measures of trade opinion by a series of questions on other topics. It is thus unlikely that the answers respondents provided to the trade-related questions affected their subsequent reaction to foreign cultural influences.

whether they would rather be a citizen of their own country over any other country in the world (Mansfield and Mutz 2009; Mayda and Rodrik 2005; Rankin 2001). Such a question does not allow for a clean separation of genuine cultural xenophobia from a type of tempered patriotism which can comfortably coexist with a strong cosmopolitan orientation. We can easily imagine an individual, for example, who holds positive attitudes toward foreign cultures and influences, who does not believe that his country is necessarily “better” than other countries in the world, but who is, nonetheless, a proud citizen with no desire to exchange his citizenship.

Given the particular design of this study, and my argument that the effect of material self-interest depends upon neutral symbolic attitudes, a related problem arises when the measure of these attitudes cannot distinguish individuals who hold a neutral stance from those who hold a positive one. The measure of ethnocentrism<sup>12</sup> employed by Mansfield and Mutz's study of trade preferences (2009) demonstrates this point. The measure is obtained by asking an individual about some positive and some negative human characteristics with reference to her (racial/ethnic) in-group as well as her out-groups. Specifically, ethnocentrism is the *difference* between the mean for positive-negative characteristic attributed to the in-group and the same characteristics attributed to the out-group.<sup>13</sup>

This particular and widely used measure of ethnocentrism enables easy identification of the prejudiced and xenophobic. It makes it especially hard, however, to distinguish between those who hold genuinely positive attitudes toward out-groups and those who are neutral. How

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<sup>12</sup> In this context, ethnocentrism refers to the tendency to think less of those who are racially or ethnically different from one's own group.

<sup>13</sup> For example, respondents are asked: “Next are some questions about various groups in our society. Below are seven-point scales on which you can rate characteristics of people in different groups. Where would you rate [BLACKS/WHITES/HISPANIC-AMERICANS] on these scales?” The scales represent positive-negative characteristics including Hard-Working-Lazy, Efficient-Wasteful, and Trustworthy-Untrustworthy.

should we classify those who obtain a score of (roughly) zero on the ethnocentrism scale, indicating that they view members of out-groups as equal to members of their own group? Are such individuals “positives” or “neutrals”? Recall that obtaining a less-than-zero (on my definition, “positive”) score on the ethnocentrism scale indicates a bias against one's *own* group—a bias we cannot expect to necessarily observe even among those who have strong cosmopolitan outlook.

The question posed on the HGS survey about the impact of foreign cultural influences thus lends itself particularly well to the design and aims of this paper. It makes it possible to cleanly distinguish prejudice and xenophobia from moderate patriotism, and offers reliable distinctions between those who hold negative, neutral, and positive sentiments toward foreignness.<sup>14</sup> From responses to this question, I construct *Cultural Sentiment*, a three-point measure of attitudes toward foreign cultural influences, where positive equals 1, neutral equals 2, and negative equals 3.<sup>15</sup>

To capture the material self-interest implications of individuals' industry of employment,<sup>16</sup> I construct *Import Industry*, a dummy variable that is coded according to the net

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<sup>14</sup> Unfortunately, I am unaware of any other survey that both measures trade opinion and allows for neutral symbolic attitudes. I am therefore currently unable to test the robustness of this study's findings with other data.

<sup>15</sup> In this data, roughly 53% of respondents are “positives,” 28% are “neutrals,” and the remaining 19% are “negatives.”

<sup>16</sup> According the Ricardo-Viner model, in which one (or more) of the factors of production is assumed to be “specific” or immobile between industries, economic returns to factors of production are tied closely to the fortunes of the industry in which they are employed. Thus, those employed in import-competing sectors are expected to suffer a real decrease in returns as a result of trade (Jones 1971). The Ricardo-Viner model stands in contrast to the Stolper-Samuelson theorem (sometimes called the Heckscher-Ohlin model), which assumes that factors of production are completely mobile across industries and thus, that economic interests with respect to trade are dictated not by industry of employment, but by factor ownership (Mussa 1974). For instance, in the United States, where unskilled labor is relatively scarce, the Stolper-



trade balance of a respondent's sector of employment.<sup>17</sup> Respondents employed in industries with a negative trade balance are coded as 1, while all others are coded as 0.<sup>18</sup> With respect to attitudes toward trade, there is no detectable difference in this data between those working in export-oriented industries and those working in non-tradables; I have therefore kept the variable binary. However, to dispel concerns that the aggregation of various sectors into a binary variable might weaken the effect of self-interest, I repeat the central analysis of the study using a continuous measure of import penetration. Those results are discussed in Section 5. Note that industry classifications are according to three-digit North American Industry Classification System codes, which is standard in the literature on trade preferences.

## 4. Results

### 4.1 Whole Sample Analysis

To begin, I take the approach that is prevalent among existing studies of trade opinion and analyze the sample as a whole. As presented in Table 1, I estimate a logit model for each of my three dependent variables, including *Cultural Sentiment* as the measure of symbolic attitudes and *Import Industry* as an indicator of economic self-interest. For each case, first differences associated with changes in cultural attitudes and industry of employment are reported in Table 2.

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Samuelson theorem expects that unskilled workers will oppose trade on economic self-interest grounds (or, more precisely, that they will oppose the import of unskilled labor-intensive products). Ricardo-Viner and Stolper-Samuelson represent the two dominant political economy models of trade preferences, predicting that material interests with respect to trade will fall along sectoral and factoral lines, respectively. The emphasis in this paper is on industry-based material self-interest, but as I explain in Section 5, this focus is due to practical and empirical reasons, not theoretical ones.

<sup>17</sup> Industry trade balances are calculated from 2010 data on U.S. imports and exports (United States International Trade Commission 2010).

<sup>18</sup> Recall from the beginning of this section that the sample was drawn from 12 targeted industries.

These results demonstrate two points. First, both material and non-material factors play an important role, on average, in the formation of individual preferences over trade. With the exception of Model 2, where *Bad US Impact* is the dependent variable, both cultural xenophobia and employment in an industry with a negative trade balance are significant predictors of negative trade-related attitudes. For example, and as reported in Table 3, a move from positive to negative on the three-point *Cultural Sentiment* scale increases the predicted probability of tariff support by 27.2%, while employment in an import industry represents a 22.2% increase in that probability.

[Tables 1-3 about here]

Second, and looking across the three dependent variables, the impact of cultural attitudes on trade opinion appears to be stronger than industry effects—in most cases, overwhelmingly so. For instance, respondents who hold negative attitudes toward foreign cultural influences are one and a half times more likely than those with positive cultural attitudes to believe that trade is bad for them and their family. A change from 0 to 1 on the Import Industry indicator, on the other hand, results in only a 26% increase in the probability of believing that trade is bad for one's self and family.

My analysis thus far has confirmed that, on average, both material and non-material factors “matter,” and that symbolic factors are generally dominant predictors of trade-related opinion. The preceding results, however, tell us little else about the micro-foundations of public opinion with respect to trade. In the sub-sections that follow, I advance the limits of scholarship on this front by taking a novel approach to the data.

#### *4.2 Split Sample Analysis*

My argument is that symbolic predispositions enjoy a higher level of priority in the formation of

preferences: they are first order factors that moderate the impact of industry considerations on an individual's stance toward international trade. Specifically, I hypothesize that the effect of material self-interest (in this case, the effect of *Import Industry*) depends upon the strength of cultural attitudes: only when attitudes toward foreign cultural influences are weak do the material self-interest considerations associated with industry of employment have any effect on preferences over trade.

To test this proposition, I first conduct a split sample analysis of the data. I divide the data into three according to the value of *Cultural Sentiment* and, in each sub-sample, separately regress my three measures of trade attitudes on *Import Industry* and the set of baseline covariates. I expect to observe strong industry effects on the outcome variables in the neutral group, but not in the sub-samples comprising individuals with either negative or positive cultural attitudes. The results, presented in Tables 4-6, are striking.

[Tables 4-6 about here]

In the case of all three dependent variables—*Bad Self Impact*, *Bad US Impact*, and *Tariff Support*—the logit coefficient on *Import Industry* is highly significant statistically in the neutral group, but does not attain conventional levels of significance in either the positive or negative sub-samples. Moreover, when beliefs about trade's personal and country-level impact are the outcome variables, the coefficient estimate on *Import Industry* takes the “wrong” (i.e., negative) sign for those on the negative end of the *Cultural Sentiment* scale.

To provide a more intuitive sense of these results, Figures 1-3 graphically present, as a function of *Cultural Sentiment*, the change in the predicted probability of each dependent variable equaling 1 (i.e., the probability of protectionism) when the value of *Import Industry* moves from 0 to 1. The vertical lines denote the 95% confidence intervals for each point

estimate, and all other variables are held at their means.

[Figures 1-3 about here]

Note that in the case of all three outcome variables, the confidence interval on the estimated change in the predicted probability of protectionism crosses zero when *Cultural Sentiment* is either positive or negative. In contrast, employment in an import-competing sector substantially increases the probability of holding negative attitudes toward international trade in the neutral category. Among neutrals, a change from 0 to 1 on the *Import Industry* indicator results in a 36% increase in the probability of tariff support (from 0.337 to 0.460), a 49% increase in the probability of believing that trade is bad for the country as a whole (from 0.222 to 0.333), and a 57% increase (from 0.195 to 0.307) in the probability of viewing trade as bad for one's self and family.

#### 4.3 Interaction Analysis

Next, to check the robustness of the preceding results, I return to the sample in its entirety and jointly test the conditional relationship suggested above by interacting cultural attitudes with *Import Industry*. As Figures 1-3 clearly demonstrate, the conditional relationship I am positing is not a linear one: when the cultural variable takes its middle value of 2 (i.e., neutral), the import dummy has a strong effect on trade opinion; this is not the case, however, when *Cultural Sentiment* takes its extreme values of 1 (positive) or 3 (negative). A straight interaction of the two variables would thus not capture the relationship. To take this non-linearity into account, I transform the three-point *Cultural Sentiment* variable into a *Neutral Sentiment* dummy, where *Neutral Sentiment* equals 1 when *Cultural Sentiment* is neutral, and 0 otherwise. I then interact the import dummy with this new variable to obtain *Import Industry\* Neutral Sentiment*.

My particular coding of *Neutral Sentiment* means that, for the purpose of this analysis, I

treat those with positive and negative cultural attitudes as equivalent. I believe this to be a defensible decision: the split sample results presented above show that the effect of *Import Industry* fades dramatically as cultural attitudes deviate from neutral in *either* direction. It is thus unlikely that observations from only one of the extremes could drive the interaction I am testing. Table 7 presents the results of the interaction analysis.

[Table 7 about here]

The analysis confirms that, at least where perceptions of trade's impact on self and country are concerned, the effect of industry is conditional upon neutral attitudes toward foreign cultural influences. As Table 7 shows, when the dependent variable is *Bad Self Impact* or *Bad US Impact*, the coefficient estimates on the interaction term carry p-values smaller than 0.05.

### **5. Potential Objections, Alternative Interpretations, and Further Robustness Checks**

How do we know that symbolic attitudes are in fact *primary*? I have demonstrated that the strength of cultural attitudes conditions the effect of industry-based self-interest on individual trade preferences, but to establish that symbolic attitudes are truly primary, I must show that the reverse conditional relationship does not also hold. Might it be that when economic self-interest is strong (i.e., when one works in an industry threatened by imports), the effect of cultural sentiment on trade opinion also dissipates?

Notice that, conveniently, this reverse conditional relationship would *not* be characterized by a corresponding non-linearity: the effect of cultural attitudes on trade opinion would simply vary as we move from those employed in import-competing industries to those who do not. Therefore, to test *this* potential conditional relationship, an interaction of the import dummy with the original three-point *Cultural Sentiment* variable is the appropriate one. I thus interact *Import Industry* with *Cultural Sentiment* to get *Import Industry\*Cultural Sentiment*. Interaction analysis

using this new term confirms that the reverse conditional relationship does not hold. The coefficient on the interaction term is not statistically significant at conventional levels for any of the three outcome variables, ruling out the possibility that the effect of cultural attitudes depends upon the value of the economic self-interest measure.

To further confirm the priority of symbolic attitudes, I perform reverse split sample analysis, this time dividing the data according to the value of *Import Industry* (i.e., import-competing or not) in order to test whether the effect of cultural attitudes on trade opinion disappears among those with strong economic interests. Again, the results provide a contrast to the split sample analysis presented earlier. Across the three dependent variables, the impact of symbolic attitudes on trade opinion is statistically significant (p-values  $\leq 0.012$ ) in both the import-competing *and* non-import-competing sub-samples, with large substantive effects in both groups.<sup>19</sup>

Alternatively, it might be argued that some *other* characteristic distinguishing the neutral group from both the positive and negative groups (i.e., something other than neutral symbolic attitudes) is driving the main results of this paper. Could it be, for instance, that the results I present in the preceding sections indicate, not that symbolic factors enjoy priority over self-interest considerations, but rather, that individuals in the neutral group are better equipped to identify their material self-interest relative to those in the positive or negative groups? For example, it might be true that neutrals are, on average, better informed or more knowledgeable than their positive or negative counterparts. This, however, is apparently not the case. By a variety of measures—frequency of news consumption, interest in news, economic knowledge, and education—positives and negatives are at least as equally informed, and in most cases

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<sup>19</sup> The full results of the preceding analysis are available in the online appendix.

significantly more informed, than individuals in the neutral group (see Figures 4-7).

[Figures 4-7 about here]

Nor does it appear to be the case that there is some other covariate imbalance between the neutral group and *both* of the other two categories. Table 8 shows that even when there is an imbalance between the neutral group and another category (in the case of education, for example), the imbalance exists only in one direction: we do not observe any imbalance between both the neutral and positive categories, *and* the neutral and negative ones. This casts serious doubt on the possibility that neutrals are somehow distinct from their negative and positive counterparts in some other way that could make their trade preferences more susceptible to the impact of industry.

[Table 8 about here]

Differences in the variances of the outcome variables across the subgroups might also be a concern. Specifically, if there is little variance on the trade opinion variables in the positive and negative groups versus in the neutral one, we might ask whether this is why the effect of industry is picked up only in the neutral category. I do not, however, observe differences of this kind for any of the dependent variables.

In another vein, readers might worry about the potential for post-treatment bias in this study: does the influence of industry on trade attitudes work through cultural sentiment, or vice versa? It is certainly plausible, for example, that cultural xenophobes might avoid employment in industries exposed to globalization, or that an individual's sector of employment might affect her cultural attitudes.<sup>20</sup> Empirically, however, these relationships do not hold: statistical analysis of

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<sup>20</sup> It should be noted, however, that the accumulated wisdom of political psychology would predict that symbolic attitudes are *not* affected by industry of employment: it is empirically well-established and widely accepted that broad symbolic predispositions form early in life and

the HGS data demonstrates that cultural attitudes and industry of employment are not significantly related. This rules out the possibility that the effect of one variable on trade preferences is mediated by the other (Imai et al. 2010).

Another set of concerns might stem from this study's exclusive focus on industry of employment as a measure of material self-interest. As I explained briefly in Section 2, the reason for this emphasis is a purely practical one: while the data used in this study offers an ideal measure of symbolic attitudes, it is limited (like many datasets) in its measure of economic self-interest with respect to trade. Most notably, the absence of a clean and direct measure of individual skill in this data makes it difficult to reliably test my theory using a skill-based measure of workers' material interests. Education, of course, is measured, but it is hardly a measure of skill alone, even when controlling for factors such as cosmopolitanism. Indeed, Rho and Tomz (2013) have recently shown that the negative correlation between education and protectionism is unlikely to reflect a desire to maximize returns to one's own factors of production. Furthermore, a fine-grained measure of occupation—one possible gauge of skill—is not statistically associated with trade preferences in this data.

Many studies face concerns related to operationalization and measurement, and this paper is no exception. Specifically, given that much of the literature on trade opinion does not find industry effects on trade preferences, one might be especially wary of this paper's reliance on an industry-based measure of self-interest. By operationalizing material interests only in this way, does the study bias the empirical results in favor of non-material factors? While a direct measure of individual skill would certainly enable a better test of the theory's broader validity, the industry effects observed in this data—and their dependence on the strength of symbolic

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remain highly stable throughout (Campbell et al. 1960; Green et al. 2002).



attitudes—are not likely to be anomalous. Indeed, the targeted sampling strategy employed by HGS was specifically designed to make possible the detection of industry effects on trade attitudes.<sup>21</sup> In contrast to national samples, where only a handful of respondents represent each industry, the HGS data deliberately sampled larger sets of workers from import-competing sectors, making it wholly unsurprising that a strong relationship between sector of employment and trade preferences is detected here, but not in many other datasets. Thus, while this paper would have been strengthened by the availability of alternate measures of economic self-interest, the measure of self-interest that I *do* use is likely to be a good one.

Finally, and as indicated earlier in the paper, in order to address concerns that the aggregation of various industries into a binary variable might weaken the effect of self-interest, I repeat the analysis of Section 4 using a continuous measure of import penetration, rather than the indicator variable *Import Industry*. To construct this continuous measure, *Import Cont*, I take the natural logarithm of  $M_i/Y_i$ , where  $M_i$  is the volume of imports in sector  $i$  and  $Y_i$  is that sector's total output. Since the non-tradables industries in my sample do not import goods, and the natural logarithm of zero is undefined, I follow Mansfield and Mutz (2009) and arbitrarily add 0.01 to  $M_i$ . Once again, I divide the data into three according to the value of *Cultural Sentiment* and, in each sub-sample, separately regress my three measures of trade attitudes on *Import Cont* and the set of baseline covariates. In the case of all three dependent variables, the logit coefficient on *Import Cont* is substantively large and highly significant statistically in the neutral group (p-values  $\leq 0.002$ ), but does not attain conventional levels of significance in either the positive or negative sub-samples. The results of the interaction analysis using a continuous rather than binary measure of import competition also reflect the main findings of this paper: in the two

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<sup>21</sup> The advantage of a targeted sampling strategy for the detection of industry effects on trade preferences is nicely articulated by Malhotra et al. (2013), p. 17-18.

models where beliefs about trade's personal and country-level impact are the dependent variables, the coefficient estimates on the interaction term *ImportCont\*Neutral Sentiment* carry p-values smaller than 0.008.<sup>22</sup>

## 6. Conclusion

Taken together, my findings provide support for the conclusion that symbolic factors enjoy priority over economic self-interest in the formation of public opinion toward international trade. I show that the effect of industry—a key measure of material self-interest in longstanding political economy models of trade—is conditional upon the strength of an individual's attitude toward foreign cultures. Specifically, only when attitudes toward foreign cultural influences are weak do considerations of material self-interest associated with industry of employment have any effect on trade opinion. When such attitudes are strong in either direction, whether positive or negative (i.e., when an individual deviates from a neutral stance on the cultural attitudes scale), the effect of economic self-interest fades completely.

The implications of these findings are significant: cultural attitudes and industry effects do not reinforce or counterbalance each other in this context; rather, material self-interest is a second order consideration that acquires salience only when strong symbolic attitudes are lacking. My findings suggest, in other words, that the affective sources of trade opinion associated with symbolic predispositions—and with out-group attitudes, specifically—enjoy primacy in the formation of individual preferences toward trade. Put differently, I show that non-material factors *define the scope conditions* for longstanding models of trade preferences based on rational economic self-interest.

The approach and conclusions of this paper make a number of significant contributions to

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<sup>22</sup> See online appendix for full regression tables.

the study of public opinion in international political economy, and to the study of international trade more broadly. Most importantly, my theory and findings push scholarship on globalization opinion toward a more nuanced and complete conception of individual preference formation. Students of public opinion in IPE have for some time debated the relative importance of material versus non-material sources of individual preferences over economic globalization, but the role and relationship of these two kinds of factors have not been directly addressed. Building on the concept of affective judgment and on the theory of symbolic politics, I advance a theoretical framework that accounts for both material and non-material factors, breaking the dichotomized debate that has come to characterize this area of study.

My argument also highlights possibilities for further, theoretically-informed investigations into both the process and implications of affectively formed preferences in the context of international trade. The theory of symbolic politics suggests that the symbols associated with trade—it is a transaction with a “foreign other”—evoke an affective response based on general and stable symbolic predispositions such as generalized prejudice, nationalism, or attitudes toward foreign cultures. The notion that trade opinion is the product of primarily emotional rather than cognitive responses can greatly illuminate, for example, our understanding of the public discourse and politics of economic globalization. Economists have long expressed surprise and dismay over the public presentation of globalization in emotionally charged and logically irrelevant terms (Krugman 1996; Mankiw and Swagel 2006).<sup>23</sup> Indeed, a significant

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<sup>23</sup> In his leaked Republican playbook, for example, communications strategist Frank Luntz advises Republican Congressional candidates: “Never, never, never begin a response to [economic globalization] by saying it is beneficial to the U.S. economy. Never... Don’t talk like economists. The key word is winning. It is essential that you capture the theme of winning and insert it into all your communications efforts” (Luntz 2005). Arnold Schwarzenegger was presumably following such advice when he defended free trade at the 2004 Republican National Convention by exhorting Americans not to be “economic girlie men” (Mullainathan et al. 2008).

proportion of public communications about economic globalization—whether for or against—is designed to activate the kinds of symbolic attitudes I have emphasized in this paper (Skonieczky 2001; Mullainathan et al. 2008). But if individuals, on average, respond to international trade affectively and in accordance with their symbolic predispositions, then the economically irrelevant frames commonly employed by political elites in public discussions of trade policy become expected rather than surprising (Sears 2001).

The resurgent discourse on international trade in the 2016 election cycle bears out this expectation in striking ways. This is especially true of the trade rhetoric employed by Republican presidential candidate Donald Trump. Trump’s rhetorical framework on this issue is decidedly “us versus them”: America is “losing all over the world” in trade, foreign countries are “stealing” American jobs, and every country (“you can just pick a name out of a hat”) is beating the United States on this dimension (*Washington Examiner*, 3 November 2015).<sup>24</sup>

It should be noted in this connection that my argument is *not* that trade opinion is static or unmalleable. On the contrary, by highlighting the variables and processes that shape the *baseline* preferences of the masses, this study sheds considerable light on the public politics of trade—helping us, for example, to identify the rhetorical frames that are most effective in shifting trade opinion in a particular subset of the population, or to understand when and why a focus trade serves the electoral interests of a political candidate.

In the context of the 2016 presidential campaign, differences in the trade rhetorics of Donald Trump and Democratic candidate Bernie Sanders are very telling in this respect. Both candidates have seized upon a high level of discontent (economic and otherwise) in the electorate, and both have found it politically effective to graft this discontent to international

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<sup>24</sup> Available at < <http://www.washingtonexaminer.com/trump-says-every-country-is-beating-the-u.s.-in-trade/article/25755422>>. Accessed 2 April 2016.

trade and globalization. Significant differences in the symbolic attitudes of each candidate's base of supporters,<sup>25</sup> however, leads to anti-trade positions that appeal to markedly different considerations. With an audience prone to out-group aversion and xenophobic sentiment, Trump casts trade as a game of winners and losers in which Americans need to fight back against foreign "others" who are stealing, cheating, and outsmarting them. But facing a base of support that is significantly more comfortable with out-groups, Sanders pulls on very different levers: he ties his anti-trade position to a broader anti-corporate message, and he uses his record on trade to differentiate himself from his democratic rival, Hillary Clinton (*New York Times*, 7 March 2016, A12). Interestingly, the out-group attitudes of each candidate's base—negative on Trump's side and positive on Sanders'—may very well be one of the key reasons why, despite fierce anti-trade rhetoric from both candidates and an emphasis on economic discontent in both campaigns, only one candidate has supporters with predominantly protectionist trade preferences. Indeed, a Pew poll conducted in March 2016 found that among Trump supporters, 67% believe that free trade deals have been bad for the United States, while only 27% believe that they have been a good thing. In contrast, 55% of Bernie Sanders' supporters view trade deals as having been good for the United States, with just 38% believing that they have been bad (Pew Research Center 2016).

In a context where trade agreements are increasingly made with specific countries or regions, the primacy of symbolic predispositions in the formation of trade preferences has further important implications for politics and policy. Scholarship on trade opinion is overwhelmingly

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<sup>25</sup> Although I do not have a direct measure of supporters' attitudes toward out-groups in the two camps, a Pew survey fielded in March 2016 indicates large differences across the two groups on this underlying dimension. For example, 69% of Trump supporters agree that "immigrants today are a burden on our country," versus only 14% of Sanders supporters; similarly, 64% of Trump supporters believe that "U.S. Muslims should be subject to more scrutiny," versus only 12% of those who support Bernie Sanders (Pew Research Center 2016).

concerned with preferences over trade in *general*, but polling data indicates that in the United States at least, the public's support for trade varies substantially across trading partners (Kohut et al. 2010). The findings of this paper suggest that this variation is due to partners' degree of cultural foreignness, not just their economic characteristics. In other words, if symbolic predispositions such as cultural attitudes direct trade preferences, then cultural distance from trading partners should result in greater opposition to trade, all things being equal.<sup>26</sup> With the primacy of symbolic predispositions established in this study, students of globalization will be much better equipped to investigate these unexplored contours of trade politics, as well as their implications for policy.

More generally, this paper contributes to the extension of the theory of symbolic politics itself, and to the study of public opinion more broadly. While the theory of symbolic politics implies that rational considerations become salient when strong symbolic predispositions are lacking, it does not advance any explicit hypotheses about preference formation under weak or neutral symbolic attitudes. The argument I have presented extends the theory in that direction. My paper highlights the possibility that, in areas where symbolic attitudes have a strong impact on behavior or opinion, paying closer attention to those who have neutral attitudes might reveal important second order dynamics at play. My findings also suggest that potentially important relationships might be masked when neutral or weak positions are either ignored or excluded on symbolic attitudinal scales.

Finally, my paper introduces beliefs about the personal and country-level impact of trade as *dependent* rather independent variables in the study of trade opinion. It has already been established that treating such beliefs as independent variables is problematic when expressed

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<sup>26</sup> Sabet 2014 directly tests and confirms this proposition.

trade policy preferences are the outcome to be explained (Fordham and Kleinberg 2012). Belief variables, however, have not been sufficiently exploited as dependent variables in this context. Given that these beliefs are extremely strong predictors of policy preferences, the factors driving them are also very likely to be indirectly affecting individual preferences over policy. Including them as additional outcome variables will afford us greater leverage in explaining public opinion toward globalization.

While the empirical evidence in support of my argument is strong, a few caveats are necessary. This study, like nearly all other studies of individual trade preferences,<sup>27</sup> is limited in that it derives trade opinion from questions about international trade in general. A more faithful test of the theory of industry-based trade preferences would, of course, require a study of attitudes toward protection for *specific* industries, with the expectation that individuals will favor protective measures for their own industry, but not for others. More recent trade theory also suggests that trade liberalization might create winners and losers within each industry (Melitz 2003; Melitz and Ottaviano 2008; Osgood 2012). As better measures and tests of alternative accounts of economic self-interest emerge, the broader validity of my theory can also be tested.

Finally, the design of this study cannot rule out the possibility that under some relatively rare and extreme economic circumstances, material self-interest might overwhelm symbolic predispositions, even among those who hold strong symbolic attitudes. If the loss of one's economic livelihood is clearly and directly threatened—that is to say, when the trade-related threat to material welfare is direct, immediate, and great—economic survival may indeed

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<sup>27</sup> The only exception of which I am aware is Rho and Tomz (2013).

dominate all other considerations.<sup>28</sup> But this qualification does not detract from the overall force and significance of my argument. What this paper has shown is that among the broad mass of voters, and at least where a central and longstanding measure of material self-interest is concerned, symbolic factors enjoy a higher level of priority in the formation of trade preferences: symbolic predispositions are first order factors that can altogether trump the contribution of economic self-interest to an individual's stance on international trade.

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<sup>28</sup> Joshua Kertzer, for example, makes a related point, showing that when economic circumstances reach a certain threshold, the effect of more subjective assessments on isolationist foreign policy attitudes dissipates (Kertzer 2013).



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Table 1: Whole Sample Analysis.

VARIABLES	(1) DV=Bad Self Impact	(2) DV=Bad US Impact	(3) DV=Tariff Support
Age	0.009* (0.004)	0.003 (0.004)	0.001 (0.003)
Education	-0.177** (0.035)	-0.169** (0.033)	-0.062* (0.028)
Income	-0.047** (0.015)	-0.062** (0.015)	-0.016 (0.013)
Female	0.544** (0.097)	0.589** (0.091)	-0.085 (0.079)
White	-0.041 (0.171)	0.307 (0.177)	0.059 (0.135)
Black	-0.439 (0.265)	-0.284 (0.264)	-0.506* (0.213)
Hispanic	-0.360 (0.301)	-0.088 (0.293)	-0.434 (0.234)
Union Member	0.279* (0.126)	0.378** (0.119)	0.123 (0.106)
Democrat	0.031 (0.177)	0.308 (0.169)	0.316* (0.144)
Republican	-0.279 (0.167)	-0.175 (0.161)	-0.077 (0.140)
Independent	-0.152 (0.170)	-0.170 (0.166)	0.179 (0.139)
Economic Knowledge	-0.179 (0.098)	-0.218* (0.094)	-0.226** (0.076)
Import Industry	0.276** (0.104)	0.162 (0.101)	0.327** (0.083)
Cultural Sentiment	0.571** (0.058)	0.660** (0.057)	0.191** (0.048)
Constant	-1.770** (0.353)	-1.743** (0.345)	-0.605* (0.286)
<i>N</i>	3,738	3,741	3,743

Note: Entries are logit coefficients with standard errors in parentheses. \*\* p<0.01, \* p<0.05

Table 2: Changes in predicted probabilities of DV=1, Whole Sample.

	Model 1	Model 2	Model 3
	DV= <i>Bad Self Impact</i>	DV= <i>Bad US Impact</i>	DV= <i>Tariff Support</i>
<i>Cultural Sentiment</i> (positive to negative)	0.183 (0.145, 0.224)	0.237 (0.194, 0.280)	0.091 ( 0.047, 0.138)
<i>Import Industry</i> (0 to 1)	0.042 (0.013, 0.077)	0.026 (-0.004, 0.058)	0.077 (0.037, 0.116)

*Note:* 95% confidence intervals are in parentheses. Models include a full set of baseline covariates (i.e., gender, race, party ID, union membership, education, income, and economic knowledge). In the analysis above, these other variables are held at their means.

Table 3: Percentage Increases in the Predicted Probabilities of Protectionism (DV=1), Whole Sample.

	Model 1	Model 2	Model 3
	<i>DV=Bad Self Impact</i>	<i>DV=Bad US Impact</i>	<i>DV=Tariff Support</i>
<i>Cultural Sentiment</i> (positive to negative)	+147.6% (from 0.124 to 0.307)	+173.0% (from 0.137 to 0.374)	+27.2% (from 0.334 to 0.425)
<i>Import Industry</i> (0 to 1)	+25.9% (from 0.162 to 0.204)	+13.6% (from 0.191 to 0.217)	+22.2% (from 0.346 to 0.423)

*Note:* Models include a full set of baseline covariates (i.e., gender, race, party ID, union membership, education, income, and economic knowledge). In the analysis above, these other variables are held at their means.



Table 4: Split Sample Analysis, DV = *Bad Self Impact*.

VARIABLES	(1) Positive	(2) Neutral	(3) Negative
Age	0.014* (0.006)	0.005 (0.008)	0.005 (0.009)
Education	-0.162** (0.056)	-0.188** (0.065)	-0.166* (0.068)
Income	-0.068** (0.022)	0.005 (0.029)	-0.087** (0.033)
Female	0.301 (0.157)	0.510** (0.172)	1.043** (0.188)
White	0.110 (0.296)	-0.366 (0.286)	0.189 (0.318)
Black	0.422 (0.391)	-1.627** (0.476)	-0.217 (0.599)
Hispanic	-0.075 (0.446)	-0.684 (0.534)	-0.449 (0.721)
Union Member	0.367 (0.191)	0.444* (0.222)	-0.042 (0.269)
Democrat	0.094 (0.305)	0.170 (0.311)	-0.132 (0.376)
Republican	-0.340 (0.329)	-0.376 (0.283)	-0.247 (0.282)
Independent	0.038 (0.309)	-0.206 (0.289)	-0.393 (0.305)
Economic Knowledge	-0.142 (0.158)	-0.228 (0.176)	-0.187 (0.192)
Import Industry	0.234 (0.175)	0.607** (0.174)	-0.099 (0.197)
Constant	-1.497** (0.553)	-0.534 (0.570)	0.284 (0.649)
<i>N</i>	1,995	1,040	703

Note: Entries are logit coefficients with standard errors in parentheses. \*\* p<0.01, \* p<0.05

Table 5: Split Sample Analysis, DV = *Bad US Impact*.

VARIABLES	(1) Positive	(2) Neutral	(3) Negative
Age	0.006 (0.006)	-0.000 (0.008)	-0.001 (0.009)
Education	-0.164** (0.052)	-0.175** (0.061)	-0.164* (0.066)
Income	-0.088** (0.021)	-0.010 (0.028)	-0.089** (0.032)
Female	0.450** (0.141)	0.613** (0.164)	0.897** (0.185)
White	0.481 (0.317)	-0.093 (0.294)	0.618 (0.317)
Black	0.548 (0.402)	-1.469** (0.449)	0.071 (0.607)
Hispanic	0.317 (0.434)	-0.767 (0.546)	0.008 (0.680)
Union Member	0.413* (0.178)	0.451* (0.214)	0.306 (0.259)
Democrat	0.450 (0.312)	0.477 (0.301)	0.200 (0.363)
Republican	0.006 (0.330)	-0.266 (0.276)	-0.258 (0.271)
Independent	0.079 (0.321)	-0.146 (0.286)	-0.479 (0.289)
Economic Knowledge	-0.157 (0.148)	-0.245 (0.171)	-0.286 (0.184)
Import Industry	0.067 (0.170)	0.538** (0.170)	-0.190 (0.194)
Constant	-1.344* (0.540)	-0.444 (0.568)	0.561 (0.647)
<i>N</i>	1,994	1,044	703

Note: Entries are logit coefficients with standard errors in parentheses. \*\* p<0.01, \* p<0.05

Table 6: Split Sample Analysis, DV = *Tariff Support*.

VARIABLES	(1) Positive	(2) Neutral	(3) Negative
Age	-0.001 (0.004)	0.003 (0.007)	0.001 (0.008)
Education	-0.089* (0.040)	-0.094 (0.054)	0.025 (0.061)
Income	-0.009 (0.017)	-0.031 (0.025)	-0.014 (0.031)
Female	-0.080 (0.111)	-0.070 (0.150)	-0.106 (0.181)
White	0.241 (0.199)	-0.352 (0.254)	0.161 (0.279)
Black	-0.032 (0.297)	-1.222** (0.390)	-0.581 (0.578)
Hispanic	-0.262 (0.311)	-1.074* (0.488)	0.184 (0.582)
Union Member	0.265 (0.145)	-0.125 (0.211)	0.070 (0.234)
Democrat	0.594** (0.226)	0.771** (0.295)	-0.666 (0.351)
Republican	0.251 (0.236)	0.361 (0.269)	-0.921** (0.269)
Independent	0.424 (0.229)	0.634* (0.273)	-0.590* (0.281)
Economic Knowledge	-0.193 (0.106)	-0.291 (0.149)	-0.185 (0.173)
Import Industry	0.223 (0.120)	0.516** (0.155)	0.284 (0.182)
Constant	-0.734 (0.389)	-0.103 (0.524)	0.310 (0.603)
<i>N</i>	1,995	1,044	704

Note: Entries are logit coefficients with standard errors in parentheses. \*\* p<0.01, \* p<0.05

Table 7: Interaction Analysis.

VARIABLES	(1) DV=Bad Self Impact	(2) DV=Bad US Impact	(3) DV=Tariff Support
Age	0.013** (0.004)	0.008* (0.004)	0.002 (0.003)
Education	-0.240** (0.034)	-0.244** (0.033)	-0.087** (0.028)
Income	-0.048** (0.015)	-0.063** (0.014)	-0.017 (0.013)
Female	0.501** (0.096)	0.534** (0.090)	-0.092 (0.079)
White	-0.079 (0.166)	0.251 (0.173)	0.045 (0.135)
Black	-0.394 (0.260)	-0.216 (0.256)	-0.483* (0.213)
Hispanic	-0.468 (0.297)	-0.220 (0.286)	-0.470* (0.234)
Union Member	0.274* (0.124)	0.365** (0.116)	0.124 (0.106)
Democrat	-0.258 (0.171)	-0.047 (0.164)	0.218 (0.144)
Republican	-0.249 (0.164)	-0.146 (0.159)	-0.066 (0.140)
Independent	-0.275 (0.167)	-0.318 (0.164)	0.137 (0.141)
Economic Knowledge	-0.218* (0.097)	-0.257** (0.093)	-0.237** (0.076)
Neutral Sentiment	0.045 (0.113)	-0.008 (0.107)	-0.064 (0.090)
Import Industry	0.119 (0.125)	0.002 (0.120)	0.250* (0.098)
ImportIndustry*NeutralSentiment	0.470* (0.208)	0.500* (0.204)	0.267 (0.177)
Constant	-0.557 (0.322)	-0.301 (0.316)	-0.169 (0.272)
<i>N</i>	3,738	3,741	3,743

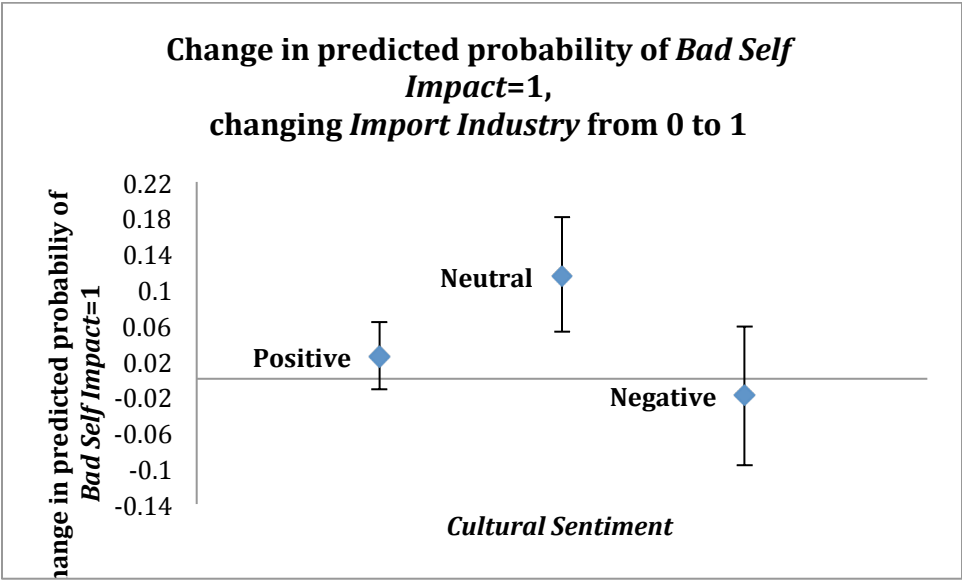
Note: Entries are logit coefficients with standard errors in parentheses. \*\* p<0.01, \* p<0.05

Table 8: Standardized Differences<sup>†</sup> of Covariate Means Across Neutral and Positive/Negative Groups.

<b>Baseline Characteristics</b>	<b>Standardized Difference of Means</b>	
	Positive vs. Neutral Groups	Negative vs. Neutral Groups
Import-Competing	-0.079	0.051
Female	0.031	0.208
Union Member	0.006	-0.016
Republican (vs. other)	-0.379	0.184
White (vs. other)	0.016	0.102
Education	0.612	0.035

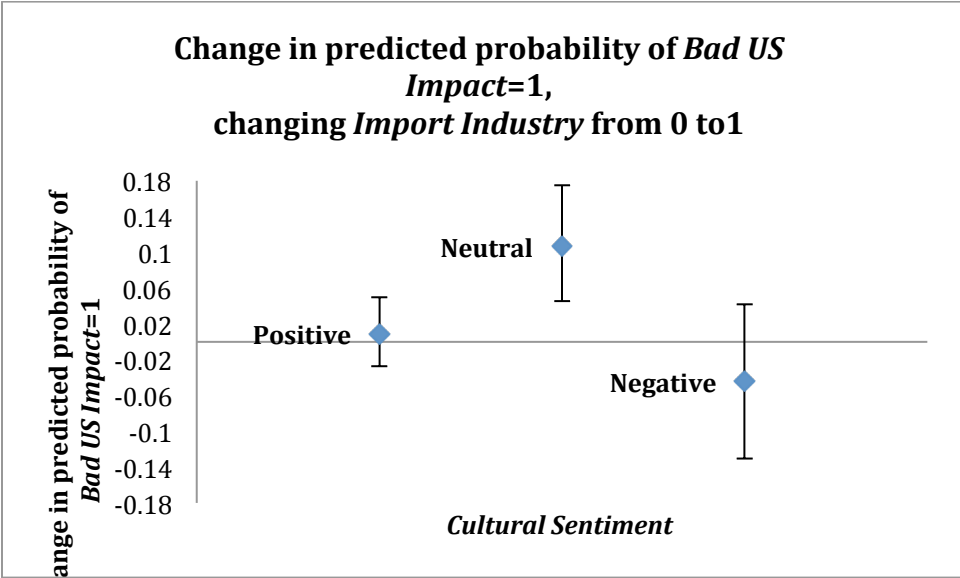
<sup>†</sup>Standardized difference = difference in means or proportions divided by standard error, with imbalance defined as absolute value greater than 0.20.

Figure 1: Change in Predicted Probability of *Bad Self Impact=1*, Changing *Import Industry* from 0 to 1.



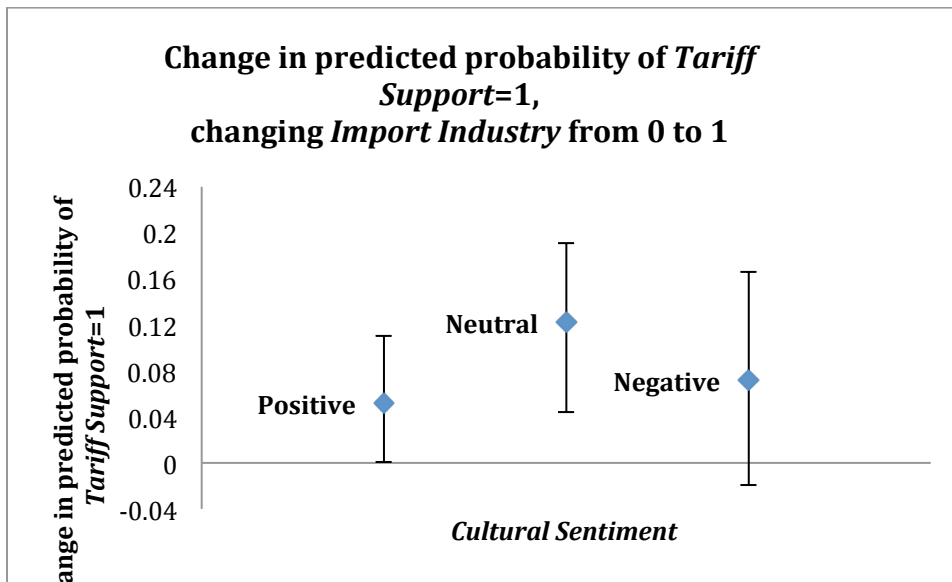
Note: Vertical lines represent 95% confidence intervals. All other variables are held at their means.

Figure 2: Change in Predicted Probability of *Bad US Impact=1*, Changing *Import Industry* from 0 to 1.



*Note:* Vertical lines represent 95% confidence intervals. All other variables are held at their means.

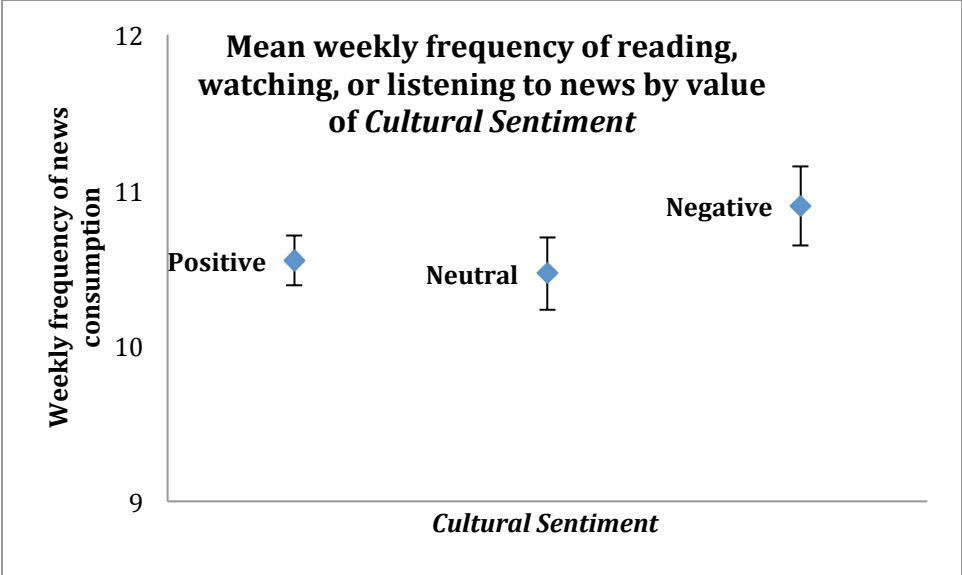
Figure 3: Change in Predicted Probability of *Tariff Support=1*, Changing *Import Industry* from 0 to 1.



*Note:* Vertical lines represent 95% confidence intervals. All other variables are held at their means.

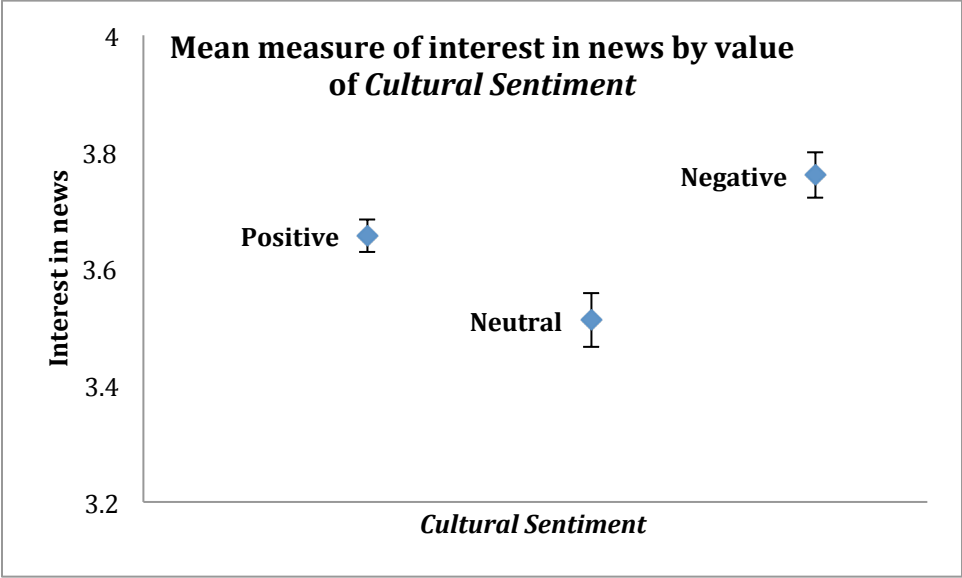


Figure 4: Mean Weekly Frequency of Reading, Watching, or Listening to News by Value of *Cultural Sentiment*.



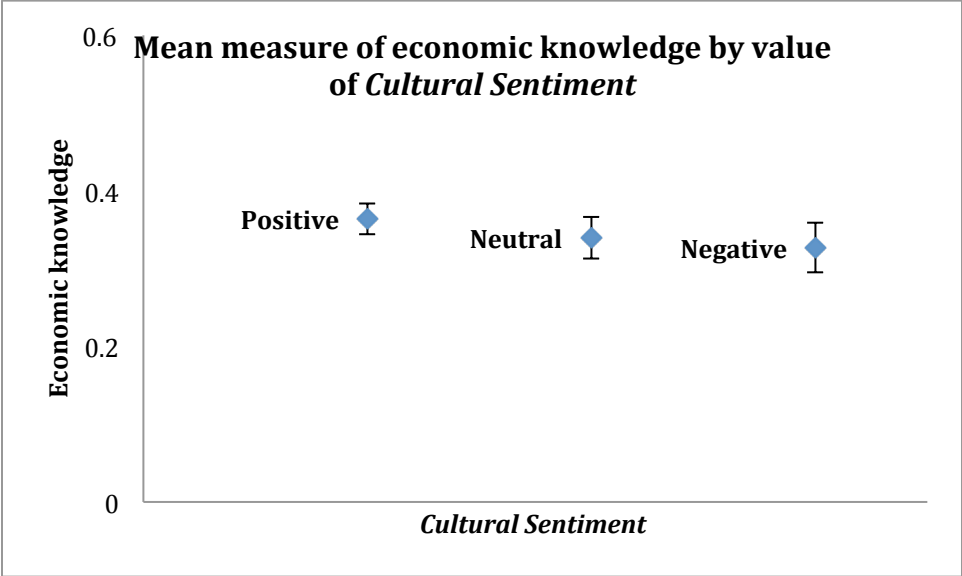
Note: Vertical lines represent 95% confidence intervals.

Figure 5: Mean Measure of Interest in News by Value of *Cultural Sentiment*.



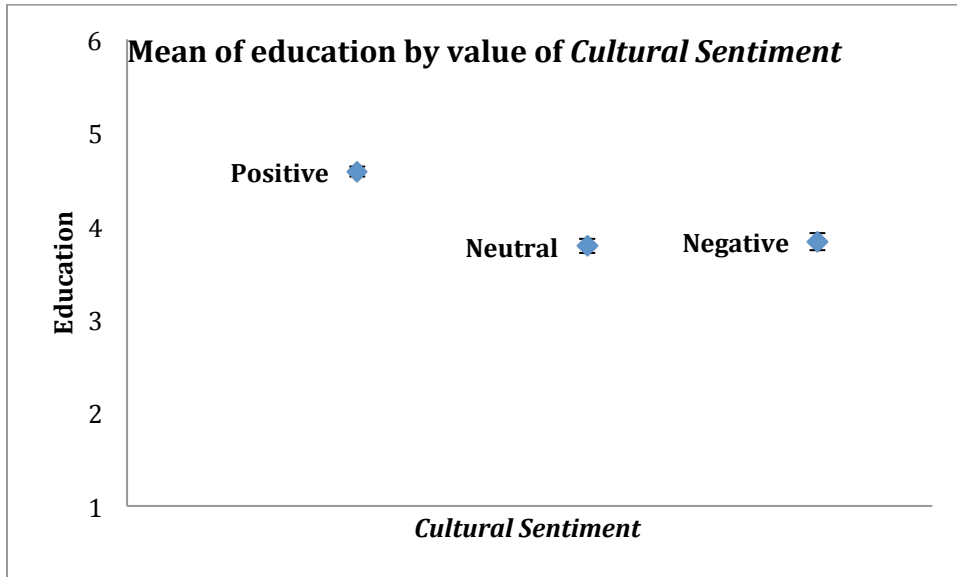
*Note:* Interest in news and public affairs as reported by respondents on a four-point scale. Vertical lines represent 95% confidence intervals.

Figure 6: Mean Measure of Economic Knowledge by Value of *Cultural Sentiment*.



*Note:* Economic knowledge was measured with a multiple choice question which asked respondents: “What must the government do to reduce high inflation?” Vertical lines represent 95% confidence intervals.

Figure 7: Mean of Education by Value of *Cultural Sentiment*.



*Note:* Education was measured on a six-point scale. Vertical lines represent 95% confidence intervals.