

**Feelings First:
Non-Material Factors as Moderators of
Economic Self-Interest Effects on Trade Preferences**

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September 2012

I am grateful to Ryan Enos, Jeff Frieden, Benjamin Fordham, Michael Hiscox, Marek Hlavac, Iain Johnston, Patrick Lam, Viri Rios, Molly Roberts, Sparsha Saha, Dustin Tingley, Kris-Stella Trump, Jane Vaynman, George Yin, and participants in Harvard's IR workshop for feedback on an earlier draft and/or helpful conversations related to this paper.

Abstract

A central debate in the study of public opinion toward international trade concerns the relative importance of material self-interest versus non-material factors (e.g., nationalism, ethnocentrism, etc.) as sources of trade preferences. While existing studies clearly show that, on average, non-economic factors do matter, the micro-foundations of preference formation – the particular role of these two types of factors, and their relationship to one another in that process – have neither been theorized nor investigated empirically. This paper takes a substantial step in that direction. My findings strongly support the conclusion that affective, non-material 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 political economy models trade preferences – is conditional upon the strength of an individual’s attitudes toward foreign cultures. Specifically, only when attitudes toward foreign cultural influences are neutral or weak do considerations of material self-interest associated with industry of employment have any effect on preferences toward trade. The implications of this finding 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 sentiments toward foreign cultural influences are lacking.

I. Introduction

What explains individual attitudes toward trade policy? While studies of public opinion toward international trade have identified a relatively wide array of variables as sources of individual trade preferences, most of these factors 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. The second category comprises non-economic attitudes that reflect cultural identity or symbolic predispositions of some kind (e.g., anti-foreign sentiment, ethnocentrism, nationalism, etc.). Indeed, one of the central debates in the extant literature pits these two categories of variables against one another (Mansfield and Mutz 2009; Fordham and Kleinberg, 2012). Taken together, existing studies of survey data have either shown that both material and non-material factors affect trade preferences (Mayda and Rodrik 2005; O'Rourke and Sinnott 2001; Rankin 2001) or, more radically, that material self-interest plays no role in shaping support for free trade (Mansfield and Mutz 2009). These studies have taken a uniform approach to the problem by focusing on the average individual and reporting how much or how little economic and non-economic factors affect trade opinion. The micro-foundations of preference formation – the particular role of these two types of factors, and their relationship to one another in that process, for example – have not yet been theorized or investigated empirically. This paper takes a substantial step in that direction.

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 attitudes toward foreign cultural influences – a non-material factor – enjoys priority over economic self-interest in the formation of public opinion. 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 attitude toward foreign cultural influences *conditions the effect* of the conventional economic variables. Specifically, only when attitudes toward foreign cultural influences are weak do the considerations of material self-interest associated with industry of employment have any effect on preferences toward trade policy. When such attitudes are strong in either direction, whether positive or negative – i.e., when an individual deviates from a moderate position on the cultural attitudes scale – the effect of economic self-interest fades completely.

The implications of this finding are striking: 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 sentiments toward foreign cultural influences are lacking. Consistent with theories of preference formation in political psychology, my findings suggest that symbolic predispositions 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.

The remainder of this paper will proceed as follows. I begin by presenting the theoretical foundation of my argument, borrowing from and building upon the theory of symbolic politics from political psychology. In Section III I turn to the data and describe the dependent and independent variables of interest in this study. Section IV presents the results of my statistical analysis. First, I follow the approach of existing studies in this area 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-related economic considerations in the formation of trade preferences. Section V considers the robustness of my findings, while Section VI concludes.

II. Symbolic Predispositions and Individual Preferences Toward International Trade

It is well-established in political psychology and American politics that non-material factors enjoy priority over economic self-interest in the formation of individual preferences toward government policy. This idea is prominently articulated in the theory of symbolic politics. According to this theory, people acquire early in life very broad and stable predispositions – e.g., prejudice, nationalism, liberal or conservative ideology – which influence their political attitudes toward particular issues in adulthood (Sears et al. 1979; Sears et al 1980). In other words, later in life, when people are confronted with a “new” policy issues (such as international trade), the symbols posed by these newly encountered issues (interaction with a “foreign other” in the case of trade, for instance) evoke habitual responses in accordance with their longstanding symbolic predispositions. Thus, individual preferences toward political issues “are formed mainly in congruence with longstanding values about society and the polity, rather than short-term instrumentalities for the satisfaction of one’s current private needs.” (Sears et al. 1980, p.671). In the American context, study after study has shown this to be the case (Lau and Heldman 2009; Sears et al. 1979; Sears et al. 1980; Tesler and Sears 2009; Tesler 2012).

Importantly, symbolic predispositions evoke responses which are highly *affective* rather than cognitive, *spontaneous* rather than deliberate, and *automatic* rather than intentional or voluntary (Sears 1993). They are, in other words, “primary” and “basic”, independent of prior cognitive appraisals (Sears 1993; Zajonc 1980). According to this psychological approach, then, the findings of my study are expected: among those with strong symbolic attitudes toward

foreign cultural influences (i.e., those most likely to react with an automatic and emotional response to the “new” issue of international trade), preferences should be unaffected by the rational calculus of self-interest.

When strong symbolic predispositions are lacking, on the other hand, the theory of symbolic politics expects that other – likely rational – considerations will come into play. For example, in a recent study of racial predispositions and vote choice in the 2008 American presidential election, 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, p. 73). The implication for attitudes toward international trade is clear: rational considerations should weigh more heavily among those who are neither cultural xenophobes nor cosmopolitans.

III. 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 large sample of U.S. workers in 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 (e.g., factor intensity, value-added per 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.¹ Once the targeted industries were identified, a sizeable sample of currently employed, native workers were 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.

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 reflected 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 who think that restrictions on trade should be greatly or somewhat increased, and 0 otherwise. Answer categories for the second two questions also spanned 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

¹ 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 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*), (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 very 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 extremely strong predictors of individual policy preferences in this area.² 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.

² A change from 0 to 1 in the value of *Bad Self Impact* results in a 30% increase in the probability of supporting trade restrictions, holding other covariates at their mean. A move from 0 to 1 in the value of *Bad US Impact* leads to a 58% increase in that probability, again holding all other variables at their mean. These figures are based on estimates from a single model that includes both belief variables as IVs, as well as a wide range of controls (i.e., gender, race, party ID, union membership, income, education, industry of employment, cultural xenophobia, and economic knowledge). In this model, beliefs about trade's personal and country-level impacts are easily the strongest predictors of trade protectionism.

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 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”.

The instrument used by the HGS survey to gauge pro- or anti-foreign sentiment is especially perfect given the aims of this paper. First, and 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 national or in-group pride. Consider, for instance, a measure of nationalism that asks respondents whether they would rather be a citizen of their own country over any other country in the world (Mayda and Rodrik 2005). 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 has no desire to exchange his citizenship for another.

Given the particular design of this study, and my argument that the effect of material self-interest depends upon neutral or weak 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 ethnocentrism³ 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.⁴

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 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—

³ In this context, ethnocentrism refers to the tendency to think less of those who are racially or ethnically different from one’s own group.

⁴ 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.

a bias we cannot expect to necessarily observe even among those who have a 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 out-groups. From responses to this question, I construct *Cultural Sentiment*, a three-point measure of attitudes toward foreign cultural influences, where positive=1, neutral=2, and negative=3.

To capture the material self-interest implications of individuals' industry of employment, I construct *Import Industry*, a dummy variable that is coded according to the net trade balance of a respondent's sector of employment.⁵ Respondents employed in industries with a negative trade balance are coded as 1, while all others are coded as 0. With respect to attitudes toward trade, there is no detectable difference between those working in export-oriented industries and those working in non-tradables; I have therefore kept the variable binary. Industry classifications are according to three-digit North American Industry Classification System codes, which is standard in the literature on trade preferences.

IV. Results

Whole Sample Analysis

To begin, I take the approach of existing studies in this area and analyze the sample as a whole. 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. First differences associated with changes in cultural attitudes and industry of

⁵ Industry trade balances are calculated from 2010 United States International Trade Commission data on imports and exports.

employment for each case are reported in Table 1.⁶ These results demonstrate two points. First, both material and non-material factors play an important role, on average, in the formation of individual preferences toward trade. With the exception of the Model 3, where *Bad US Impact* is the dependent variable, both cultural xenophobia and employment in an industry with a negative trade balance are strong predictors of negative trade-related attitudes. For example, a move from positive to negative on the 3-point *Cultural Sentiment* scale increases the predicted probability of tariff support by 29%, while employment in an import industry represents a 23% increase in that probability.

[Table 1 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 non-material factors are generally stronger predictors of trade-related opinion. However, the preceding results tell us little else about the micro-foundations of preference formation with respect to trade. In the sub-sections that follow, I try to advance the limits of scholarship in this area by taking a novel approach to the data.

⁶ Full regression tables for all of the analysis presented in this paper are included in the Appendix.

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 position 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 considerations of material self-interest associated with industry of employment have any effect on preferences toward trade policy. 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* (1=positive, 2=neutral, 3=negative) 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 attitudes toward foreign cultural influences. The results, presented in Tables 2-4, are striking.

[Tables 2-4 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, Figure 1-3 graphically present – as a function of *Cultural Sentiment* – the change in the predicted probability of each dependent variable equaling 1 when the value of

Import Industry moves from 0 to 1. The vertical lines denote the 95% confidence intervals for each point estimate.

[Figures 1-3 about here]

Interaction Analysis

Next, I return to the sample in its entirety and try to jointly test the conditional relationship suggested above with an interaction of cultural attitudes and *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*=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 result presented above show that the effect of *Import Industry* fades dramatically as cultural attitudes deviate from neutral in *either* direction. It is thus very unlikely that observations from only one of the extremes could drive the interaction I am testing. Table 5 presents the results of the interaction analysis.

[Table 5 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 5 shows, for DV=*Bad Self Impact* and DV=*Bad US Impact*, the coefficient estimates on the interaction term carry p-values smaller than 0.05.

V. The Robustness of the Results and Alternative Interpretations

I have argued that that the strength of cultural attitudes conditions the effect of self-interest on individual trade preferences. But to establish that symbolic attitudes are truly primary, I must demonstrate that the reverse conditional relationship does not also hold. Does a strong economic threat from trade (i.e., employment in an import-competing industry) condition the effect of cultural sentiment on trade opinion? Notice that this reverse conditional relationship would *not* be characterized by a corresponding non-linearity. Therefore, in this case, an interaction of the import dummy with the original three-point *Cultural Sentiment* variable is the appropriate one. To test this possibility, I 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 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.

Alternatively, it could be argued 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 neutral groups. For example, it might be true that “neutrals” are, on average, better informed or more knowledgeable than their “positive” or “negative” counterparts. This is, however, is not the case. By a variety of measures – frequency of news consumption, interest in news, education, and economic knowledge – positives and negatives are

at least as equally informed, and in most cases significantly more informed, than individuals in the neutral group.

To further test the robustness of this study's findings, I repeat the analysis of Section IV using a continuous measure of import penetration rather than the binary variable *Import Industry*. To construct this continuous measure, *ImportCont*, 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 *ImportCont* and the set of baseline covariates. In the case of all three dependent variables, the logit coefficient on *ImportCont* is substantively large and highly significant statistically in the neutral group (p-value ≤ 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 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.

Substituting a five-point measure of *Cultural Sentiment* for the three-point measure I use in the original analysis also has no bearing on the overall results. Recall that I collapse a five-point attitudinal scale into three categories: those who respond that foreign cultural influences are either "very" or "somewhat" positive (negative) for the United States are coded as "positives" ("negatives") and treated as equal in the analysis. I make this decision largely to avoid putting undue weight on potentially very subjective differences between those within the

positive or negative category. Conducting the split sample analysis on five rather than three categories, however, yields results that mirror my original findings.

Finally, it might be the case that symbolic predispositions and industry of employment are not independent. We can imagine cultural xenophobes, for instance, avoiding employment in sectors that are exposed to globalization. If an individual's choice of industry is endogenous to her attitude toward foreign cultures, then my findings become susceptible to yet another alternative interpretation: we do not observe independent industry effects among those with strong cultural attitudes because the choice of industry is itself driven by that symbolic predisposition. The *reverse* relationship between industry and cultural attitudes – i.e., cultural sentiment as a function of economic self-interest – would be even more damaging to the overall thrust of my argument. I find, however, that cultural attitudes and *Import Industry* are not correlated (Pearson's $r = 0.053$), and that the distribution of industry is virtually identical across the three categories of *Cultural Sentiment*. This is not surprising: it is empirically well-established and widely accepted in political psychology that broad symbolic predispositions form early in life and remain highly stable throughout (Campbell et al. 1960; Green et al. 2002).

VI. Conclusion

Taken together, my findings provide strong support for the conclusion that symbolic factors – which prompt an automatic affective response, rather than deliberate cognitive one – 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 trade preferences – is conditional upon the strength of an individual's attitudes 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 preferences toward trade policy. When such attitudes are strong in either direction, whether positive or negative (i.e., when an individual deviates from a moderate stance on the cultural attitudes scale) the effect of economic self-interest fades completely.

The implication of these findings is 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 sentiments toward foreign cultural influences are lacking. My findings suggest that the affective sources of trade opinion associated with identities, values, and symbolic predispositions enjoy a higher level of priority in the formation of preferences: they are first order factors that can altogether trump the contribution of economic self-interest to an individual's stance on international trade.

The approach and conclusions of this paper make a number of important contributions to the study of public opinion in international political economy (IPE). Most importantly, my findings push scholarship in this area toward a more nuanced conception of individual preference formation. Students of public opinion in IPE have for some time debated the relative importance of material versus non-material factors as sources of individual preferences toward economic globalization. The particular role and relationship of these two types of factors, however, have been neither theorized nor rigorously investigated. This study makes a substantial contribution in that direction.

Importantly, my argument builds upon a theoretical framework from political psychology, highlighting possibilities for further, theoretically-informed investigations into the process of preference formation 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”, for instance – evoke an affective response based on general and stable symbolic predispositions such as nationalism or attitudes toward out-groups. The notion that trade opinion is the product of primarily emotional rather than cognitive responses is reflected not only in the findings of this paper, but also in the many recent findings in IPE that symbolic predispositions are very strong predictors of preferences toward trade. If directly tested and confirmed in an experimental setting, this proposition about the affective basis of trade preferences would shed considerable light on the micro-foundations of public opinion in international political economy. It would also ground and inform our understanding of the public discourse and politics of economic globalization: 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.⁷

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 strong effects on behavior or opinion, paying closer attention to those who have weak 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 identity-based attitudinal scales.

⁷ Mankiw and Swagel 2006 and Krugman 1996, for example, express surprise and dismay over the public presentation of globalization in emotionally charged, but logically irrelevant terms.

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 trade policy preferences is 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 international trade.

Bibliography

- Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. 1960. *The American Voter*. New York: John Wiley & Sons, Inc..
- Fordham, Benjamin O. and Katja B. Kleinberg. 2012. How Can Economic Interests Influence Support for Free Trade? *International Organization*. 66 (2).
- Green, Donald, Bradley Palmquist, and Eric Schickler. 2002. *Partisan Hearts and Minds: Political Parties and the Social Identities of Voters*. New Haven: Yale University Press.
- Krugman, Paul. 1996. Ricardo's Difficult Idea.
- Lau, Richard R. and Caroline Heldman. 2009. Self-Interest, Symbolic Attitudes, and Support for Public Policy: A Multilevel Analysis. *Political Psychology*. 30 (4).
- Mankiw, Greg and Philip Swagel. 2006. The Politics of Offshore Outsourcing.
- Mansfield, E. and D. Mutz. 2009. Support for Free Trade: Self-Interest, Sociotropic Politics, and Out-Group Anxiety. *International Organization* 63 (3).
- Mayda, Anna Maria, and Dani Rodrik. 2005. Why are Some People (and Countries) More Protectionist than Others? *European Economic Review* 49 (6).
- O'Rourke, Kevin and Richard Sinnott. 2002. The Determinants of Individual Trade Policy Preferences. In *Brookings Trade Forum*, edited by Susan M. Collins and Dani Rodrik. Washington, D.C.: Brookings Institution.
- Rankin, David M. 2001. Identities, Interests, and Imports. *Political Behavior* 23 (4).
- Sears, David O., Carl P. Hensler and Leslie K. Speer. 1979. Whites Opposition to "Busing": Self-Interest or Symbolic Politics? *American Political Science Review* 73.
- Sears, David O., Richard R. Lau, Tom R. Tyler and Harris M. Allen, Jr. 1980. Self-Interest vs. Symbolic Politics in Policy Attitudes and Presidential Voting. *American Political Science Review* 74.
- Sears, David O. 1993. Symbolic Politics: A Socio-Psychological Theory. In *Explorations in Political Psychology*, ed. Shanto Iyengar and William J. McGuire. Durham, NC: Duke University Press.
- Tesler, Michael and David O. Sears. 2009. *Obama's Race: The 2008 Election and the Dream of a Post-Racial America*. Chicago: University of Chicago Press.
- Tesler, Michael. 2012. The Spillover of Racialization Into Health Care: How President Obama Polarized Public Opinion by Racial Attitudes and Race. *American Journal of Political Science*, 56 (3).

Zajonc, Robert B. 1980. Feeling and Thinking: Preferences Need No Inferences. *American Psychologist* 35.

Table 1. Changes in predicted probabilities of DV=1

	Model 1 <i>DV=Tariff Support</i>	Model 2 <i>DV=Bad Self Impact</i>	Model 3 <i>DV=Bad US Impact</i>
<i>Cultural Sentiment</i> (min to max)	.090 (.045, .132)	.183 (.141, .227)	.236 (.193, .281)
<i>Import Industry</i> (0 to 1)	.078 (.039, .118)	.042 (.011, .073)	.027 (-.004, .059)

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 2. Effect of industry on *Bad Self Impact* by value of *Cultural Sentiment*.

Value of <i>Cultural Sentiment</i>	Coefficient on <i>Import Industry</i>	P-value	Observations
Positive	.234 (-.108, .577)	0.179	1995
Neutral	.607 (.267, .947)	0.000	1040
Negative	-.099 (-.485, .288)	0.616	703

Logit coefficients are shown with 95% confidence intervals in parentheses. Each row provides the estimate of the logit coefficient obtained from a separate regression of *Bad Self Impact* on *Import Industry* and a full set of baseline covariates (i.e., gender, race, party ID, union membership, education, income, and economic knowledge).

Table 3. Effect of industry on *Bad US Impact* by value of *Cultural Sentiment*.

Value of <i>Cultural Sentiment</i>	Coefficient on <i>Import Industry</i>	P-value	Observations
Positive	.067 (-.266, .400)	0.694	1994
Neutral	.538 (.203, .874)	0.002	1044
Negative	-.190 (-.570, .190)	0.327	703

Logit coefficients are shown with 95% confidence intervals in parentheses. Each row provides the estimate of the logit coefficient obtained from a separate regression of *Bad US Impact* on *Import Industry* and a full set of baseline covariates (i.e., gender, race, party ID, union membership, education, income, and economic knowledge).

Table 4. Effect of industry on *Tariff Support* by value of *Cultural Sentiment*.

Value of <i>Cultural Sentiment</i>	Coefficient on <i>Import Industry</i>	P-value	Observations
Positive	.223 (-.012, .459)	0.063	1994
Neutral	.516 (.213, .819)	0.001	1044
Negative	.284 (-.072, .640)	0.118	704

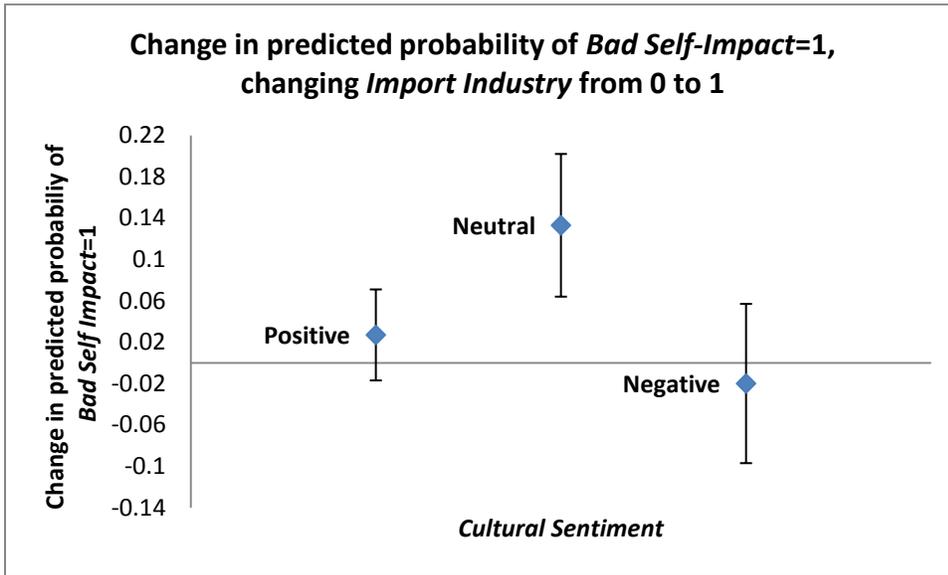
Logit coefficients are shown with 95% confidence intervals in parentheses. Each row provides the estimate of the logit coefficient obtained from a separate regression of *Tariff Support* on *Import Industry* and a full set of baseline covariates (i.e., gender, race, party ID, union membership, education, income, and economic knowledge).

Table 5. Interaction between *Import Industry* and *Neutral Sentiment*

	DV= <i>Bad Self Impact</i>	DV= <i>Bad US Impact</i>	DV= <i>Tariff Support</i>
<i>Import Industry</i>	.119 (p-value=0.342)	.002 (p-value=0.985)	.250 (p-value=0.011)
<i>Neutral Sentiment</i>	.045 (p-value=0.688)	-.008 (p-value=0.942)	-.064 (p-value=0.481)
<i>Import Industry*Neutral Sentiment</i>	.470 (p-value=0.024)	.500 (p-value=0.014)	.267 (p-value=0.130)

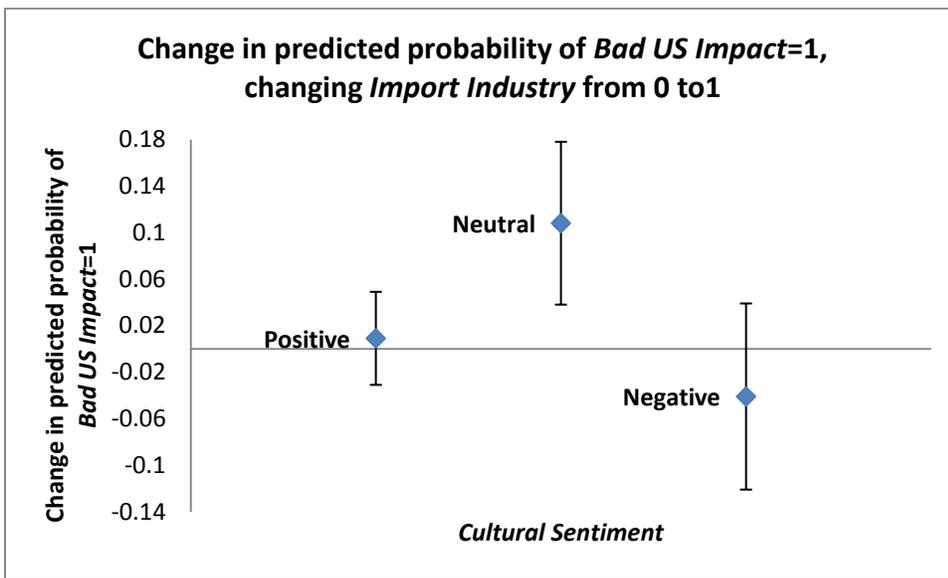
Logit coefficients are shown with p-values in parentheses. A full set of baseline covariates (i.e., gender, race, party ID, union membership, education, income, and economic knowledge) was included.

Figure 1



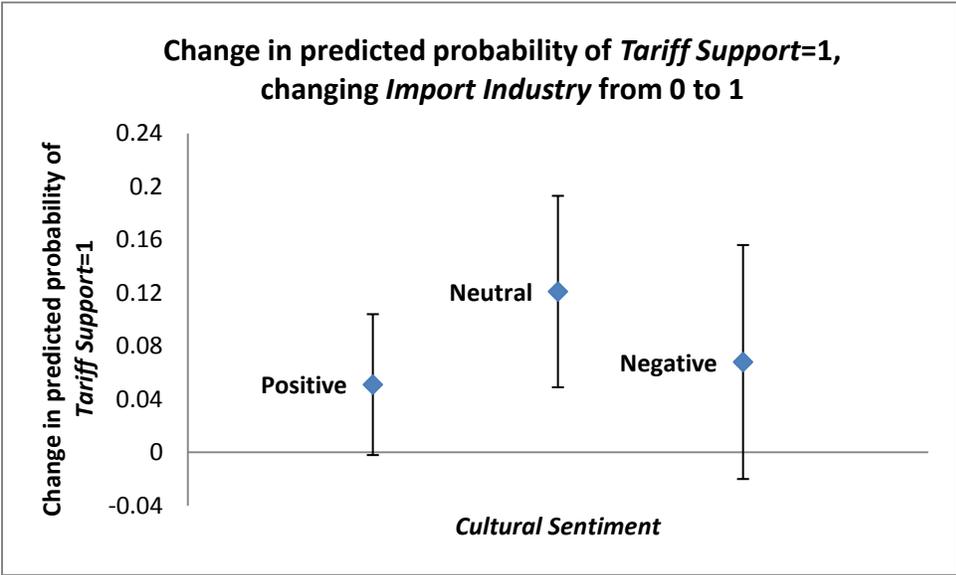
Vertical lines represent 95% confidence intervals. All other variables are held at their means.

Figure 2



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

Figure 3



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

Appendix

Table A1. Whole Sample Analysis.

VARIABLES	(1) DV=Bad Self Impact	(2) DV=Bad US Impact	(3) DV=Tariff Restriction
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

Robust standard errors in parentheses. ** p<0.01, * p<0.05, + p<0.1

Table A2. 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

Robust standard errors in parentheses.

** p<0.01, * p<0.05, + p<0.1

Table A3. 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

Robust standard errors in parentheses.

** p<0.01, * p<0.05, + p<0.1

Table A4. 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

Robust standard errors in parentheses.

** p<0.01, * p<0.05, + p<0.1

Table A5. Interaction Analysis.

VARIABLES	(1) DV=Bad Self Impact	(2) DV=Bad US Impact	(3) DV=Tariff Restriction
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)
N	3,738	3,741	3,743

Robust standard errors in parentheses. ** p<0.01, * p<0.05, + p<0.1