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# Relative Economic Performance and Individual Trade Preferences

Quynh Nguyen,

ETH Zurich

## Abstract

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# Relative Economic Performance and Individual Trade Preferences

Quynh Nguyen, ETH Zurich  
[quynh.nguyen@ir.gess.ethz.ch](mailto:quynh.nguyen@ir.gess.ethz.ch)

## Abstract

Pocketbook concerns or sociotropic considerations? This question regarding the type of economic information that has the most influence on individuals' trade preferences has generated a large number of studies but with no conclusive answers. Existing research typically focuses exclusively on either individuals' perceptions of their pocketbook or people's sociotropic considerations of the country's economic condition. In contrast, this study provides a general model which integrates both types of economic assessment to explain variations in public support for international trade. Findings from the analysis based on survey data from the American National Election Studies (ANES) collected in multiple survey rounds (1992-2012) suggest that perceptions of a person's economic condition *relative* to how they think the country as a whole has fared play a significant role in determining individuals' attitudes toward trade.

## Keywords

Public Opinion, International Trade, Relative Deprivation, Sociotropic, Egotropic, Mass Media

## **Introduction**

A recurring theme in the public discourse on the desirability of trade agreements, including the current negotiations on the Trans-Pacific Partnership (TPP), evolves around the widespread fear of the potential loss of local jobs and stagnation of wages and incomes. Such concerns, as famously captured by Ross Perot's analogy of the "giant sucking sound", draining millions of jobs from the American heartland, is said to reflect one of the main sources of public agony with economic openness. The standard literature commonly presents individual trade policy preferences largely as a function of employment and earning effects of international economic integration. The basic assumption is that expectations about positive economic effects from trade are said to increase popular support for free trade. In contrast, anticipation of negative economic consequences from international trade tends to give rise to popular demand for protectionism. However, it is unclear whether individuals evaluate the effects of international trade based on their personal material welfare, or whether this assessment is based on the state of the country's economy as a whole.

Scholars advocating the influence of pocketbook concerns contend that in formulating their trade preferences, individuals rely on personal-level experiences (Mayda and Rodrik 2005, O'Rourke and Sinnott 2001, Scheve and Slaughter 2001). More broadly, it is assumed that individuals have preferences for a growing personal pocketbook under trade. Thus, individuals who expect to benefit from greater employment opportunities under trade liberalization are likely to support free trade, while individuals who worry about job loss or wage reduction due to economic openness tend to oppose it. This assertion has increasingly been challenged by more recent studies, which focus on the impact of sociotropic evaluations on individuals' attitudes toward trade (Mansfield and Mutz 2009, Schaffer and Spilker 2013). It is argued that individual trade preferences are predominantly determined by people's perception of the country's economic performance rather than reflecting their pocketbook

considerations. In other words, trade opinions mirror people's concerns about the impact of trade liberalization on the national economy as a whole.

Attempts to test the impact of either egotropic or sociotropic beliefs on individuals' attitudes toward trade have typically generated inconclusive findings. While some scholars find that individuals' trade preferences are more sensitive to beliefs about their own economic situation, other studies show that trade attitudes vary with people's perceptions of the health of the nation's economy. The possibility that pocketbook and sociotropic economic assessments operate in tandem to shape the way individuals view economic globalization has not been adequately accounted for in the existing literature. In this study I address this gap by developing a general model, which integrates the influence of sociotropic and pocketbook evaluations to explain variations in citizens' support for economic globalization.<sup>1</sup> In comparing their pocketbooks with the country's economic state individuals can update their assessment of trade's welfare effects. When individuals believe that the overall economy is performing well while their own financial household experiences economic hardship, they may think that they are losing out under trade. This would leave them feel relatively deprived and they will be more likely to oppose trade liberalization. In contrast, when they consider their economic situation to be improving while others in society are struggling, this will lead them to feel like a net benefactor of economic openness. A more advantaged economic condition vis-à-vis the national economy will therefore increase individuals' support for trade liberalization.

Using survey data from the American National Election Studies (ANES) collected in multiple survey rounds (1992-2012), I first test the impact of individuals' assessment of their pocketbook relative to the rest of the country on stated levels of support for international trade. Results from this analysis suggest that perceptions of a person's economic condition

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<sup>1</sup> The framework builds on Killian et al.'s (2007) voter-turnout model which examines the joint impact of both pocketbook and sociotropic evaluations on electoral behavior.

*relative* to how they think the country as a whole has fared play a significant role in determining individuals' attitudes toward trade. In a second step, documenting the appearance of news stories about trade-related topics in US newspapers and newswires from the LexisNexis database<sup>2</sup> as well as television news from the Vanderbilt Television News Archive<sup>3</sup> for the time period under study (1992-2012), I find that there is high fluctuation in media attention to trade policy issues over time. Based on the count measure of news coverage of trade topics in television news broadcasts and newspapers and a measure of self-reported weekly TV news and newspaper consumption, I develop a first-order estimate for the level of exposure to newspaper and television coverage of free trade issues at the individual level. The results suggest that shifts in individuals' exposure to media coverage of trade issues can account for variation in mass support for import restrictions.

The paper is organized as follows. The first section reviews the relevant literature and embeds the research question into the existing scholarly debate. In the next section, I outline how individuals' perceptions about personal economic conditions relative to the country's economy is likely to influence people's opinions about international trade. From this I derive testable implications, which are to be empirically evaluated in section 3. I first present the data and briefly describe the procedures for extracting the relevant information from the ANES surveys and the news archives, before testing the paper's hypothesis. Section 4 presents the results. The final section concludes and provides potential avenues for future research.

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<sup>2</sup> The LexisNexis database maintains legal and public-records related information from scientific journals, newspapers, web-based publications, official press releases, and other information sources. It provides computer-assisted counts of pre-defined keywords in its archived outlets. <http://www.lexis.com/>, accessed: February 23, 2015.

<sup>3</sup> The Vanderbilt Television News Archive maintains a library of televised network news programs. It provides computer-assisted counts of pre-defined keywords in its archived television networks. <http://tvnews.vanderbilt.edu/>, accessed: March 1, 2015).

## **Egotropic versus Sociotropic Trade Preferences**

Much of the research on individual trade policy preferences has largely focused on studying how expected economic effects of international trade drive public opinion on trade policy. However, a major ongoing debate in the existing literature is concerned with whether citizens evaluate international trade from an individual pocketbook or an aggregate, sociotropic perspective. In other words, there is disagreement over whether people's views about economic globalization are affected more by their preference for a strong national economy or a growing personal pocketbook under trade.

Early proponents of pocketbook effects assert that one's personal financial situation provides an easily accessible, immediate heuristic to derive political preferences such as approval of political incumbents or public goods provision (Downs 1957, Fiorina 1978, Kramer 1971, Popkin et al. 1976). In addition, pocketbook concerns have also been central to explaining variation in public support for international trade (Irwin 1996, Magee 1980, Mayda and Rodrik 2001, O'Rourke and Sinnott 2001, Scheve and Slaughter 2001). Most prominent are explanations that rely on economic models of trade integration's expected distributional impact. These arguments are derived from the standard models of trade liberalization: the Stolper-Samuelson (or Hecksher-Ohlin, H-O) model and the Ricardo-Viner (R-V) model, which focus on the implications of trade on individuals' income and job prospects in explaining individual trade attitudes. As a starting point both models posit that changes in trade policy will have an effect on individuals' employment and incomes, with trade either increasing or decreasing one's job opportunities and earnings. Accordingly, if trade is believed to lead to the loss of one's job or lower wage, an individual will oppose trade. By contrast, if an individual experiences higher incomes and better employment opportunities under trade, this person will support trade.

More recently, the egotropic account of individual trade preferences has come under strong criticism. One of the main reservations raised in these studies is concerned with the

informational demand that egotropic preferences place on the individual<sup>4</sup> (Fordham and Kleinberg 2012, Schaffer and Spilker 2013). In particular, these authors contend that it is unrealistic to assume that individuals would undertake sophisticated cost-benefit analyses of the economic implications of trade on their own personal employment status or income level. Similarly, Mansfield and Mutz point to the difficulty for individuals to link their personal economic experiences to government policy (2009: 432). Instead, individuals are more likely to hold policymakers accountable based on collective-level information about how the national economy is being affected under a certain policy. Thus, to the extent that trade preferences are similar to attitudes toward other aspects of economic policy, they will stem from people's evaluations of the collective impact that trade policy has on the nation.

Despite the large number of empirical studies there is still ongoing debate concerning the type of economic outcomes people employ in order to interpret the economic effects of trade. A more recent contribution by Schaffer and Spilker (2013) aims to resolve this controversy by means of a survey experiment. While previous studies examine the influence of either country-level or personal economic concerns on individual trade attitudes separately, the authors propose an experimental design, which incorporates both types of information. By exploiting the impact of the information differential between national-level outcomes and personal consequences from trade, the authors account for the potential joint effect of sociotropic and egotropic considerations. The inclusion of both sociotropic and egotropic evaluations into the analysis presents an important extension of existing research designs. Nevertheless, economic evaluations are still conceptualized as separate sources of individual trade preferences. This is for example reflected in the study's main conclusion that people are more strongly persuaded by information about the implications of trade on their own material

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<sup>4</sup> In response to this criticism other authors have also investigated a broad set of alternative non-economic factors, which stress the influence of cultural and psychological factors in explaining individual attitudes towards international trade. For example: Cosmopolitanism, nationalism, chauvinism, social trust, environmental concerns, partisanship, etc. (Bechtel et al. 2012, Hainmueller and Hiscox 2006, Kaltenthaler and Miller 2013, Kaltenthaler et al. 2004, Mayda and Rodrik 2005, O'Rourke and Sinnott 2001).

welfare as compared to information about how the country fares under economic openness (Schaffer and Spilker 2013).

In this paper, I argue that individuals employ personal and societal-level economic concerns simultaneously in order to arrive at an individual judgment about the economic consequences from trade. In other words, in assessing the economic impact of international trade, perceptions about one's personal, general economic situation are put into perspective with the country's economic situation. More specifically, starting from perceptions of their financial household, individuals then embeds this into a wider evaluation of how they think the country as a whole has fared under trade. When individuals believe that the overall economy is performing well while their own financial household experiences economic hardship, they would feel that they are losing out under trade. Similarly, economic improvements perceived at the personal level can still cause feelings of underachievement if one thinks that the rest of the country has experienced larger gains. This is likely to leave individuals feel relatively deprived and more likely to oppose trade liberalization. In contrast, individuals who consider their economic situation to be in a better shape than the country's economic health are more likely to support economic openness. It is this evaluation of one's relative performance under trade that is likely to influence the way people think about trade. The importance of income comparisons has already been documented in various contexts of individual preference formation and decision-making.

### **The Importance of Relative Income**

The importance of income comparisons on individuals' level of satisfaction has been extensively explored in the "economics of happiness" literature (Akerlof and Yellen 1990, Blanchflower and Oswald 2004, Boskin and Sheshinski 1978, Easterlin 1974, 1995, Frank 1985, Frey and Stutzer 2002, Layard 1980). While terminology definitions vary, a common attribute emphasized in the literature is the idea of a reference level of income that individuals



employ in order to compare their own income. When an individual perceives her income to fall relative to the reference income level, she feels relatively deprived “and is less happy” (Clark and Oswald 1996: 360).

In his seminal work on the influence of economic growth on subjective wellbeing, Easterlin (1974) points out that human happiness is not determined by absolute income growth. In his comparison of reported levels of subjective wellbeing across countries and over time, he notes that there are correlations between a country’s average wealth and reported average level of its citizens’ subjective wellbeing. At the same time, however, differences in subjective wellbeing between rich and poor countries are small and inconsistent. For instance, for the time period under study (1945-1970) subjective wellbeing in the U.S. has largely remained unchanged although real income had doubled. Based on these findings, the author submits that increases in individual income do not lead to more happiness. Rather, in evaluating their personal economic situation people look to the financial conditions of others in society as a reference norm (Easterlin 1995). Thus, as a country’s overall economic conditions improve over time, individuals adjust their comparison standards of desirable income based on others’ finances around them (Diener 1984). This social comparison may then lead individuals with unchanged income to feel poorer. Similarly, those who feel that they have not gained as much as others in society may feel relatively deprived despite having experienced absolute gains.

Such a reference-dependent evaluation of subjective wellbeing is also reported in Graham and Pettinato (2002). Studying self-reported levels of happiness before and after market integration in Peru and Russia, the authors find that citizens living in recently liberalized economies often evaluate their subjective wellbeing in a more negative light than in the pre-liberalization period, despite experiencing real income gains following the transition. From a rational point of view, individuals should support market integration if they enjoy material gains under trade. However, evidence of the “frustrated achievers”

phenomenon indicate that opposition to trade openness may be driven by negative perceptions of one's economic standing relative to the country's average rather than by losses or gains in absolute terms. In Graham and Pettinato's (2002) terms, frustrated achievers experience greater dissatisfaction from their conclusion that they have fared worse than others in society than the pleasure associated with absolute gains experienced under trade.

Similarly, Lü et al. (2012) provide an explicit test of the implications of intra-personal income comparisons on individuals' trade attitudes in a survey experiment. Providing participants with varying wage levels of an average worker in a given sector, the authors differentiate between the influence of *advantageous* and *disadvantageous inequity aversion* on individuals' stated support for trade protection. They find that individuals with incomes greater than the income of the average worker in the industry under consideration for protection are more supportive of sector-specific trade barriers. Conversely, when individuals experience disadvantageous inequity aversion, i.e. if the respondent's income is below the average wage of the industry under consideration, she is less supportive of protectionism for that given industry. From these findings Lü et al. (2012) conclude that individuals are not concerned per se about inequity among other people, but are only interested in their own material payoff relative to others. In other words, individuals may not only care about whether they are personally faring better, but may be affected by whether these improvements are as large or larger than those that have been achieved by other segments of the society.

Thus, building on these previous studies I conjecture that in formulating their preferences over trade policy, individuals are influenced by subjective assessments of their personal economic condition relative to perceptions of the country's economic health.<sup>5</sup> Integrating the impact of both pocketbook and sociotropic outcomes on individual trade preferences reconciles the debate concerning the informational demand on individuals in forming their interest-based preferences.

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<sup>5</sup> For an application of the framework to explain voter turnout, see Killian et al. 2007.

First, in line with the argument advocated by the egotropic framework, I argue that personal economic experiences are an easily accessible cue for individuals, and one that does not require much political sophistication. Reviewing their economic circumstances, individuals can conveniently make a judgment as to whether their financial situation has improved or worsened (in absolute terms).

Second, citizens update their evaluations of their economic status according to their perceptions of how the country as a whole has fared. Subjective assessments of the country's economy do not assume an unrealistic level of political knowledge on the part of the individual (Kinder and Kiewiet 1981: 132). By contrary, information about the health of the nation's economy are readily and abundantly available to citizens via the mass media or people's daily social interactions with others.

Individuals who perceive the economy as performing well may ascribe a positive national-level impact to trade on the basis of this belief. In contrast, individuals who perceive the country's economy as performing poorly may interpret it as trade having negative effects on the national economy. By comparing their personal economic situation to the national economy individuals can then derive an overall judgment of economic implications from trade liberalization. More specifically, individuals who infer from a positive national economic environment that most people have benefited from trade, but see no improvements of their own economic situation, will feel that they have lost out under trade (even though they may have experienced individual gains). Conversely, individuals who are persuaded by information about the country's economy that trade has negative effects on the country's economic welfare, but perceive their financial household to be in a better condition, will feel like a net benefactor under economic openness. This is likely to translate into a positive overall assessment of trade liberalization.

The study's empirical implications can therefore be formulated as follows: *Individuals who perceive their household to be performing better than the country average are more*

*likely to support trade liberalization as compared to individuals who perceive their household to be performing worse.*

## **Empirical Strategy**

The data employed to test the hypotheses outlined above are based on the American National Election Studies (ANES). While survey responses from the ANES are widely used in electoral behavior research, it is somewhat underutilized in the individual trade preference literature. Scheve and Slaughter (2001) rely on the 1992 survey wave from the ANES to examine the impact of individuals' skill levels on trade attitudes. Hainmueller and Hiscox (2006) make use of two survey waves (1992, 1996) from the ANES to investigate to what extent individuals with higher levels of education differ from their less educated counterparts in the way they think about economic globalization. This study uses data from six survey waves (1992, 1996, 2000, 2004, 2008 and 2012) with a pooled sample of over 15,400 respondents. Descriptive statistics for all variables employed in the analysis are presented in Table A1 of the Appendix.

### *Attitudes toward International Trade*

Since 1992, the ANES survey has asked its respondents to report their attitude toward international trade using the following question: *Some people have suggested placing new limits on foreign imports in order to protect American jobs. Others say that such limits would raise consumer prices and hurt American exports. Do you favor or oppose placing new limits on imports, or haven't you thought much about this?* Coding non-responses, including "Don't know" and "Haven't thought much about this" as missing values significantly decreases the

sample size by more than 40%.<sup>6</sup> The thus generated binary measure of mass support for import restrictions (*Protectionism*) is coded as 1 if the respondent favors the implementation of such measures, while opposition to limiting foreign import is coded as 0.

### Relative Performance Perceptions

To generate the main independent variables – individuals' combined ego- and sociotropic economic evaluations – I use respondents' assessments of their current personal economic situation compared to the previous year as well as perceptions of the country's economic performance compared to a year ago. Responses to both survey questions are measured on a three-point scale indicating subjective perceptions of improvement ("better"), deterioration ("worse") or no change ("the same"). One may suspect that responses to the two questions are highly correlated. However, Pearson's correlation coefficient (=0.1283) confirms that respondents do conceptually distinguish when being asked to evaluate their economic situation, and when being asked about their assessment of the country's economic performance.<sup>7</sup> Matching each response category from the two questions with each other generates nine response pairs indicating individuals' pocketbook evaluations relative to subjective assessments of the country's economic condition. I then combine and group all nine categories into one variable. The thus generated categorical variable, *Relative Performance*, has five defined values. The categories at both ends of the variable indicate the greatest disparity between the respondent's perceived economic situation and the country's economic condition. Category 1 (Much worse) captures the situation in which the respondent perceives her personal economic condition to have worsened while the country's economy has improved. At the other end, category 5 (Much better) presents the best possible matched outcome from the respondent's perspective, i.e. when the respondent perceives her private

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<sup>6</sup> The significant reduction in the sample size is caused by the significant proportion of respondents who selected the response option "Haven't thought much about this". Except for the year 1992, across all the survey waves included in the analysis respondents selecting this category represented by far the largest group.

<sup>7</sup> In addition, in the questionnaire of survey waves under study, the questions about the national economy and the respondent's financial household do not appear immediately one after the other but are spread out in the survey.

finances to have improved over the previous year, while the country's economic condition is considered to have worsened. The categories in between 2 (Worse) and 4 (Better) and (4)) represent smaller distances between the respondent's self-reported economic situation and her perception of the country's economic performance. Greater values indicate a gradual improvement of the respondent's financial household vis-à-vis the country's economy. The middle category 3 (Same) contains all matched categories which indicate no perceived difference between the respondent's personal finances and the country's economy.

### Control variables

To test whether the hypothesized relationship is robust across a range of individual characteristics, I make use of the ANES' rich set of information on respondents' socio-economic background. Existing studies have identified a range of factors, which are likely to have considerable impact on how individuals view trade liberalization. In most existing studies the group of individuals who tend to profit under free trade seem to include the young, the better educated and those having higher occupational skills. Elderly people, women and the less educated stratum are often categorized as "losers" of international economic integration.

For example, some studies observe that females are more likely than males to oppose trade liberalization (Beaulieu and Napier 2008, Burgoon and Hiscox 2008, Mayda and Rodrik 2005, Kaltenthaler et al. 2004, O'Rourke and Sinnott 2001). Burgoon and Hiscox (2008) argue that differences in educational experience, in particular exposure to economic ideas at the college level, appear to be most plausible in explaining gender differences in attitudes toward trade.<sup>8</sup> *Gender* is denoted as a binary variable with female respondents being coded as 1, and males as 0.

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<sup>8</sup> Other avenues of explanation such as particular labor-market risks and costs associated with maternity, or gender differences in non-material values did not appear to be related to the gender gap in trade preferences (Burgoon and Hiscox 2008).

Other studies have shown that unemployed individuals express stronger support for limiting open trade than their employed counterparts. These individuals are often presumed to either blame economic globalization for their loss of employment or believe open trade will hurt their prospect of securing new employment (Ehrlich et al. 2010, Mansfield and Mutz 2009). I include a *Work Status* variable indicating whether the respondent is currently working (1) or not (0).

Furthermore, various authors document an age effect with older individuals appearing to be more supportive of protectionism (Ehrlich et al. 2010, Kaltenthaler et al. 2004, Mansfield and Mutz 2009, Mayda and Rodrik 2005, O'Rourke and Sinnott 2001). This is commonly attributed to an increased sensitivity to losing income. *Age* is a continuous variable calculated from respondents' birthdate.<sup>9</sup>

In their cross-country analysis Mayda and Rodrik (2005) find that political affiliation is significantly associated with individual attitude toward trade. In particular, individuals located on the right hand side of the political spectrum tend to be more supportive of liberalization policies than individuals who report stronger identification with left-wing political parties. The ANES data provides rich information on respondents' political view and political participation. In this study, I employ the survey's *Conservative* index ranging from 0 to 100. Middle values on this scale indicate neutrality, while higher values greater political conservatism.

Moreover, in almost all existing studies, respondents' level of education consistently features as a prominent explanatory factor of variation in public support for trade among individuals. While some studies treat education primarily as a proxy measure for respondents' skill level, other interpretations of the impact of education levels on trade opinions emphasize ideological differences between highly educated and low-educated individuals. More specifically, these include a greater familiarity with the standard economic models of

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<sup>9</sup> I take January 1<sup>st</sup> of the respective survey year as the reference date.

international trade as well as a cultural mechanism that relates commitments to key values, such as tolerance and cosmopolitanism, to attitudes towards foreign policy issues (Hainmueller and Hiscox 2006). *Education* is a 7-categories measure ranging from: 1) 8 grades or less (“grade school”) to 7) Advanced university degrees.

To test the robustness of the influence of relative income considerations on individual attitudes I also control for respondents’ reported real income, which is assigned to a corresponding percentile group. Altogether, the *Income* variable contains five categories. Higher value categories represent membership to a higher income group.

Finally, I also include a *Year* variable to control for potential differences in the relationship between respondents’ perceived relative economic performance and their preference for trade protectionism across the different survey waves.

## **Results**

Table 2 presents the results of the multivariate logit regression in which the dependent variable is a binary measure based on the question whether the respondent favors import restrictions (1) or not (0). For ease of interpretation, the reported results show estimated marginal effects.<sup>10</sup> I first estimate the separate effect of sociotropic and pocketbook evaluations of the economy on individual attitudes towards international trade. The results in Column 1 indicate that positive assessments of both the national and respondents’ personal economic condition decrease support for trade protectionism. However, the effect is not statistically significant. The estimates for the included *Year* variable suggest that compared to 1992, protectionist sentiments significantly decreased in the subsequent years until 2004.

Column 2 reports the results for the effect respondents’ perceived economic performance relative to the country’s economy over the past 12 months. The lowest perceived relative income category, which captures the largest discrepancy between the respondent’s

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<sup>10</sup> The point estimates from the raw regression are presented in Table A2 of the Appendix.



personal economic condition and the national economy, is set as the reference category. As the results show, moving from the most disadvantageous economic condition (from the respondent's perspective) to the next better condition, i.e. the respondent perceives no changes to her own economic status while the national economy is considered to have improved, significantly decreases individuals' likelihood to support trade restrictions by 8.7 percentage points. A reduction in the respondents' probability to favor limiting foreign imports (5.7 percentage points) is also observed as one moves from the worst possible economic condition (from the respondent's perspective) to a instances that capture no perceived differences between the national economy and the respondent's economic condition. As indicated by the negative sign of the coefficient estimate, moving from the reference category to the *Better* category also reduces respondents' likelihood to support import restrictions by 2.7 percentage points. Finally, moving from the worst relative performance to the best category from the respondent's point of view, i.e. when respondents consider their personal economic situation to be improving as compared to a regressive economy significantly reduces support for protectionist measures by 8.7 percentage points. Interestingly, perceptions of relative performance captured in the intermediate categories do not seem to have an impact on individuals' trade preferences. While the coefficient signs are negative as expected, they do not approach statistical significance. This suggests that the differences between these categories are not sufficiently salient to the individual to shape her trade attitudes. Overall, however, the results lend support to the hypothesis that the better the individual perceives her economic situation to be compared to the country average, the more likely is she to support trade liberalization.<sup>11</sup>

Table 2 also reports the results for the included set of control variables described above. Females and older people are more likely to support import restrictions, whereas educational attainment and identification with the Democratic Party are negatively correlated

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<sup>11</sup> I also estimated a set of ordered probit models. The results remain substantively and statistically very similar.

with protectionist sentiments. However, the coefficients do not reach statistical significance. I again find statistically significant differences in the level of stated support for trade restrictions across the survey waves. Compared to 1992, respondents were less likely to favor limits on foreign imports in each of the following three survey waves.

Finally, while the majority of existing studies have documented a significant influence of absolute income on mass support for trade liberalization, the findings here suggest that this relationship is no longer robust when relative income perceptions are considered. This underlines the importance of relative gains considerations in explaining individual trade preferences.

**Table 2: Marginal Effects on Individual Trade Preferences**

VARIABLES	(1)	(2)	(3)
Sociotropic performance: Stayed same	-0.0128 (0.0191)		
Sociotropic performance: Better	-0.0154 (0.0218)		
Egotropic performance: Stayed same	-0.0016 (0.0227)		
Egotropic performance: Better	-0.0147 (0.0187)		
Relative performance: Worse		-0.0869** (0.0435)	-0.0866** (0.0436)
Relative performance: Same		-0.0558 (0.0398)	-0.056 (0.0398)
Relative performance: Better		-0.0268 (0.0415)	-0.0269 (0.0416)
Relative performance: Much better		-0.0874** (0.0445)	-0.0875** (0.0446)
TV News Exposure			0.0085* (0.0049)
Newspaper Exposure			0 (0)
Female	0.0222 (0.0156)	0.0227 (0.0156)	0.0228 (0.0156)
Working	0.0265 (0.0183)	0.0260 (0.0183)	0.0259 (0.0183)
Income	-0.005 (0.0076)	-0.0069 (0.0076)	-0.0071 (0.0076)

Education	-0.0017 (0.0053)	-0.0022 (0.0052)	-0.0022 (0.0052)
Age	0.0007 (0.0005)	0.0007 (0.0005)	0.0006 (0.0005)
Conservative	-0.0004 (0.0004)	-0.0002 (0.0004)	-0.0002 (0.0004)
1996	-0.164*** (0.0301)	-0.161*** (0.0299)	0.126 (0.169)
2000	-0.191*** (0.0374)	-0.188*** (0.0373)	0.119 (0.181)
2004	-0.144*** (0.0344)	-0.128*** (0.0329)	0.0919 (0.136)
2008	0.0192 (0.0255)	0.0269 (0.0248)	0.281* (0.153)
2012	-0.0107 (0.0208)	-0.009 (0.0194)	0.271 (0.165)
Observations	6,072	6,072	6,072

*Note:* (1) The reported coefficients from the logit regression are estimated marginal effects and show the marginal effect on Pr(y=1 (Favor new limits on foreign imports)) given a unit increase in the value of the given predictor variable, holding all other variables at their sample mean values. (2) Standard errors in parentheses. (3) \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. (4) All predictors at their mean value.

### Issue Salience of International Trade

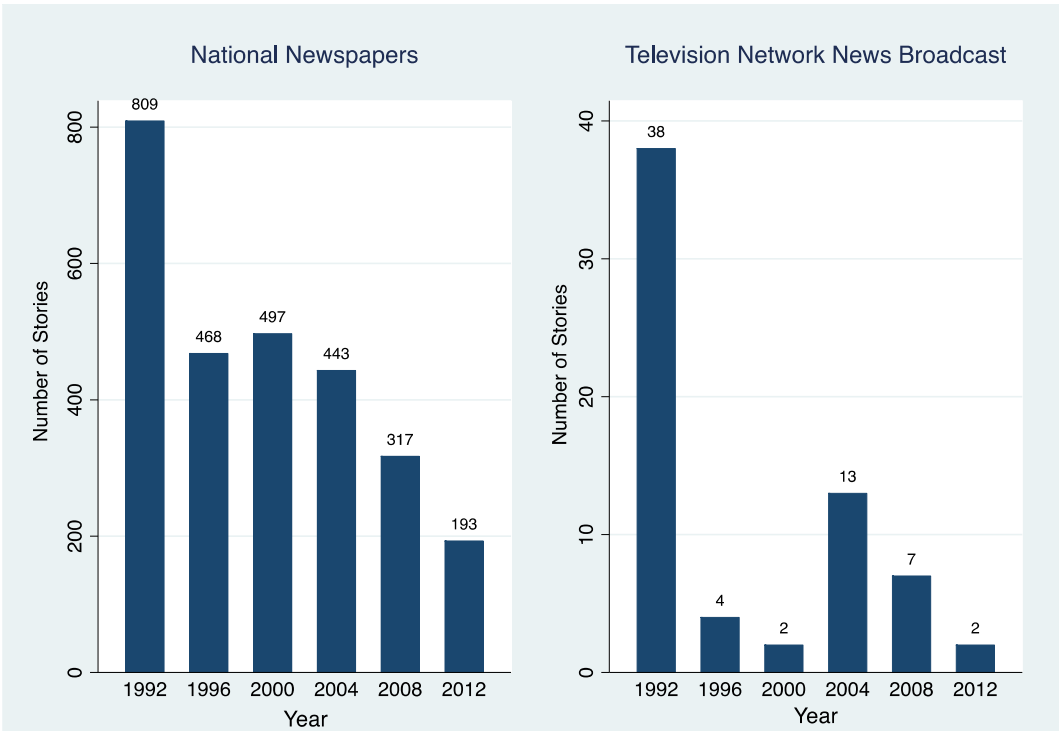
To further probe the observed differences in respondents' trade attitudes across the survey waves, I explore the time dimension as shifts in individuals' media exposure to trade-related topics over time. While previous studies have already written off trade policy as a generally low-salience issue individuals take little interest in (Guisinger 2009, Hiscox 2006), I expect that people's concern for trade-related topics and consequently their attitudes towards trade can vary with changes in the level of media attention to trade issues. To this end, I first generate a count measure of trade coverage as the appearance of trade-related topics in both news broadcast and newspapers from 1992 to 2012. Using the LexisNexis archive's computer-assisted word count function, I identified the total number of times when the term "free trade"<sup>12</sup> appears as a major mention<sup>13</sup> in certain newspapers within a given year. I restricted the word count to appearances in the top two newspapers with nationwide

<sup>12</sup> I avoided potentially loaded terms such as "import limits" or "trade barriers" in order to capture neutral (or both negative and positive) issue coverage of the topic.

<sup>13</sup> That is, if the specified search term appears in headline, lead paragraph or indexing.

circulation, *The New York Times* and *USA Today*, to ensure that the counts are taken from the same sources over the years of interest. Similarly, appearances of “free trade” issues in televised news<sup>14</sup> are accessed through the Vanderbilt Television News Archive. I restrict my search to the “Big Three” US television networks, *American Broadcasting Company* (ABC), *Columbia Broadcasting System* (CBS) and *National Broadcasting Company* (NBC), in order to ensure comparability of the sources over time.

**Figure 1: Salience of Trade Issues in Mass Media from 1992 through 2012**



Source: LexisNexis Database and Vanderbilt University Television News Archive.

*Note:* The left panel shows the number of stories about “free trade” appearing in the two largest national news papers (*The New York Times* and *USA Today*). The right panel shows the number of stories shown on the three largest television network news broadcast (ABC, CBS and NBC).

The search results show that there is indeed considerable fluctuation in media attention to trade policy issues over the years under study. As illustrated in Figure 1, although the absolute word count numbers differ between the two mediums, the distributions are similar. For example, both in print and TV, attention to trade-related topics was highest in 1992.

<sup>14</sup> That is, if the news item contains the term “free trade” in its title or abstract.

Unsurprisingly, discussions about the implications of the North American Free Trade Agreement (NAFTA) dominated the contents of the majority of the reported news items amid the negotiations and signature of the agreement later in the year. In 1994, the year in which the agreement came into force, the media seem to have significantly lost interest in trade policy issues, resulting in the largest drop from one time period to another. In fact, as the figures show, news coverage of trade issues in later years never reached the 1992 level again. In both newspaper and TV there has been a gradual decrease in media attention to trade topics from 2004 to 2012.

To create a newspaper trade exposure variable, the documented coverage of trade issues for each of the survey year under study was multiplied by the following weights based on self-reported weekly newspaper consumption: 0 days (weight=0), 1 day (weight=0.2), 2 days (weight=0.4), 3 days (weight=0.6), 4 days (weight=0.8), 5 days and more (weight=1). The thus generated variable is a first-order estimate for the level of exposure to newspaper coverage of free trade at the individual level. To develop a measure of individual exposure to TV news coverage of free trade topics I proceeded in the same way using the count measure of free trade coverage in television news broadcasts and self-reported weekly TV news consumption.

Column 3 presents the estimated marginal effects for respondents' likelihood to support import restrictions when individual exposure to newspaper and TV news on trade topics are included. The results show that individual exposure to TV news coverage on trade issues is significantly and positively correlated with protectionist sentiments. Surprisingly, no such effect can be identified for respondents' exposure to newspaper trade coverage. In addition, when controlling for TV news exposure renders, it can be observed that the effects of the year variable observed in the previous analyses are no longer statistically significant. Overall, this lends some support to the assumption that the observed shifts in respondents'

trade preferences across survey years can be to some extent be accounted for by their level of exposure to news coverage about the free trade.

These findings also point to another issue: Increased media exposure to trade issues does not necessarily generate more public support for economic globalization. To the contrary, the results suggest that more exposure coverage of trade-related topic in TV news broadcasts significantly increases respondents' likelihood to support import restrictions. Such an impact of mass-mediated information on individuals' trade attitudes contrasts the widely voiced claim that public opposition to free trade stems from widespread ignorance about trade issues among the general public and thus a lack of information on trade topics (e.g. Caplan 2006). Following Mutz and Mansfield's (2013) observation of news contents of trade issues in the media, the problem may lie with the predominantly negative news reporting about international trade. In particular, the authors note that media coverage of trade in the United States is almost exclusively concerned with job loss. Results from their content analyses of newspapers and television detect a strong bias toward news stories on the adverse consequences of economic integration. The unbalanced reporting may be due to the fact that stories about the negative effects of trade are more dramatic and thus "sell better", whereas benefits from international are more technical and more difficult to tell a story with. As Mutz and Mansfield put it: "When local jobs are created due to open markets, few people will be aware of this fact. When jobs are lost due to outsourcing, it will be headline news." (2013: 4). This coverage bias suggests that exposure to mediated information about international trade will be dominated by negative primes. At the same time, however, it needs to be noted that the influence of media contents on individual trade attitudes is not likely to be unidirectional. Rather, information provided by the media can also reflect a general public mood about economic globalization. In other words, a lingering anti-trade mood among the wider public is not likely to encourage an increased number of positive news stories about economic openness. Given the dampened enthusiasm for trade liberalization among the American public

these days, it may, therefore, be generally harder to convince individuals of the benefits of international trade than adding to their preexisting beliefs about the negative implications of free trade.

## **Conclusion**

Economic evaluations are considered an important foundation of individual trade preferences. The existing literature has thus far focused on studying the impact of either pocketbook evaluations or sociotropic considerations as independent determinants of individual trade preference. Scant attention has been devoted to the possibility to integrate both pocketbook and sociotropic economic assessments into a model of individual trade preference formation. Growing evidence from various disciplines, notably from experimental economics and political psychology research, however, suggests that pocketbook and sociotropic evaluations are best understood in tandem to arrive at a more informative model of individual decision-making. To address this gap this study asks: To what extent are individual trade preferences influenced by individuals' perception of their pocketbook conditions relative to how they think the country is faring economically? To test the complementary impact of pocketbook and sociotropic evaluations, I match respondents' evaluation of their personal economic status with their assessment of the country's economic performance. This thus generated variable of perceived relative performance has five categories each indicating a subjective comparison between the respondent's economic performance and the country's economic health.

The findings from the empirical analysis suggest that relative performance considerations have a significant effect on the way individuals think about international trade. More specifically, individuals who consider their personal economic situation to be in a better shape than the country average are more likely to oppose import restrictions. Conversely,

perception of an inferior economic status as compared to the rest of the country tends to encourage greater protectionist demand. It needs to be mentioned, however, that not all categories of relative performance exert a significant impact on respondents' trade attitude. For example, respondents who perceive their economic situation to be improving amid worsening economic conditions at the national level are significantly more likely to oppose trade limits. Yet, no significant difference can be observed between respondents who think that their financial household is worsening while the country's economy experiences improvements, and people who consider both their economic situation and the country's economy to have remained the same. This may be due to the fact that the intermediate categories of relative income perception are conceptually not easily distinguishable. Nevertheless, the overall findings are consistent with the theoretical prediction that people's combined egotropic and sociotropic concerns have an impact on trade attitudes. As a person moves from a (her point of view) very disadvantaged economic status to a highly advantaged economic condition, this is likely to increase her support for economic openness. Notably, in none of the models absolute income turns out to have a statistically significant effect on individual trade preferences.

To explore observed shifts in individuals' attitudes towards international trade across the survey waves under study, I measure survey respondents' exposure news reporting on trade-related topics in both print media and television. First, counting TV and newspaper coverage of trade topics, I find that, against conventional wisdom, there is significant fluctuation in the importance the media attributes to international trade topics. Second, the findings suggest that mass-mediated information about international trade and individuals' exposure to such information can shape individuals' trade policy preferences. Surprisingly, high exposure to media coverage about trade does not increase people's likelihood to adopt more favorable attitudes towards free trade. To the contrary, the empirical findings indicate that an increase in the level of individual exposure to TV news coverage about trade-related



issues significantly increases people's likelihood to support import restrictions. Mutz and Mansfield (2013) warn that media coverage of trade issues is evidently biased toward highlighting negative implications of free trade. Given the widespread lack of knowledge about international trade among the wider public exposure to such prejudiced media information can further exacerbate anti-trade attitudes.

This circumstance calls for an active role of political leadership and public education in order to provide a more balanced presentation of the impact of economic openness. Making the topic of trade policy more accessible to the wider public can raise public awareness about the importance of economic integration in fostering economic prosperity both in the US and abroad. However, observations during election campaigns indicate that politicians typically refrain from publicly making the case for economic openness for fear of electoral repercussions (Mutz and Mansfield 2013: 4). Without a systematic and unbiased public discourse about international trade the growing backlash against open markets and free exchange of goods and services is likely to gain further momentum.

In addressing the most common economic misunderstandings about the effects of trade liberalization in order to formulate adequate public education programs, it is important to identify the sources of such prejudiced conceptions. By examining the influence of mass-mediated information on individual trade attitudes, the present study and Mutz and Mansfield's (2013) work discussed above present an important step in this direction. However, future research could further probe the impact of elite cues on individuals' attitudes toward international trade. Careful content analyses of the parties' as well as individual politicians' agendas with regards to trade policy can shed important light on the top-down channel of individual trade preference formation.

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## Appendix

**Table A1:** List of Variables and Descriptive Statistics

	Obs	Mean	Std. Dev.	Min	Max
<b>Protectionism</b>					
“Some people have suggested placing new limits on foreign imports in order to protect American jobs. Others say that such limits would raise consumer prices and hurt American exports. Do you favor or oppose placing new limits on imports, or haven’t you thought much about this?” [0=Oppose; 1= Favor]	7634	0.6334	0.4819	0	1
<b>Egotropic evaluation of economic performance</b>					
Would you say that you (and your family living here) are better off, worse off or just about the same financially as you were a year ago? [1=Worse; 2=Same; 3=Better]	15234	2.0355	0.8769	1	3
<b>Sociotropic evaluation of economic performance</b>					
Now thinking about the economy as a whole, would you say that over the past year the nation’s economy has gotten better, stayed about the same, or gotten worse? [1=Worse; 2=Same; 3=Better]	15325	1.7943	0.8065	1	3
<b>Relative performance</b>					
Matched responses between egotropic and sociotropic evaluation of economic performance. [1=Much worse; 2=Worse; 3=Same; 4=Better; 5=Much better]	15122	3.2439	0.9726	1	5
<b>TV Exposure</b>					
Count measure of coverage of trade topics in selected TV news broadcasts weighted by self-reported weekly TV consumption.	15454	8.8519	13.111	0	38
<b>Newspaper Exposure</b>					
Count measure of coverage of trade topics in selected newspaper journals weighted by self-reported weekly newspaper consumption.	15454	320.9508	280.0385	0	809
<b>Gender</b>					
[0=Male; 1=Female]	15454	0.5389	0.4985	0	1
<b>Employment status</b>					
“We’d like to know if YOU are working now, temporarily laid off, or are you unemployed, retired, permanently disabled, a homemaker, a student, or what?” [0=Not working (includes: temporarily laid off, unemployed, retired, permanently disabled, homemaker, student); 1=Working]	15454	0.5889	0.492	0	1
<b>Family income</b>					
“Please look at the booklet and tell me the letter of the income group that includes the income of all members of your family living here in 2003 before taxes. This figure should include salaries, wages, pensions, dividends, interest, and all other income.” (collapsed) [1=0 to 16 <sup>th</sup> percentile; 2=17 to 33 <sup>rd</sup> percentile; 3=34 to 67 <sup>th</sup> percentile; 4=68 to 95 <sup>th</sup> percentile; 5=96 to 100 <sup>th</sup> percentile]	14284	2.8044	1.1505	1	5
<b>Age</b>					
“What is the month, day and year of your birth?”	15334	47.8937	17.2014	18	96
<b>Political ideology</b>					
“Would you consider yourself a LIBERAL or a CONSERVATIVE?” (collapsed to a binary variable based on Conservative (0-100) thermometer index) [0=Liberal; 1=Conservative]	13393	51.1534	17.7003	0	97

**Table A2: Impact on Individual Trade Preferences (logit estimates)**

VARIABLES	(1)	(2)	(3)
Sociotropic performance: Stayed same	-0.0551 (0.0817)		
Sociotropic performance: Better	-0.066 (0.0933)		
Egotropic performance: Stayed same	-0.0067 (0.0978)		
Egotropic performance: Better	-0.0628 (0.0802)		
Relative performance: Worse		-0.379* (0.197)	-0.378* (0.197)
Relative performance: Same		-0.248 (0.183)	-0.249 (0.183)
Relative performance: Better		-0.121 (0.191)	-0.122 (0.191)
Relative performance: Much better		-0.381* (0.201)	-0.381* (0.201)
TV news Exposure			0.0363* (0.021)
Newspaper Exposure			-0.0002 (0.0004)
Female	0.095 (0.067)	0.0973 (0.0669)	0.0975 (0.0669)
Working	0.113 (0.0781)	0.111 (0.0778)	0.11 (0.078)
Income	-0.0215 (0.0325)	-0.0297 (0.0325)	-0.0305 (0.0325)
Education	-0.0073 (0.0225)	-0.0093 (0.0224)	-0.0092 (0.0224)
Age	0.0028 (0.0022)	0.0028 (0.0022)	0.0027 (0.0022)
Conservative	-0.0017 (0.0019)	-0.0008 (0.0019)	-0.0008 (0.0019)
1996	-0.682*** (0.124)	-0.669*** (0.124)	0.508 (0.683)
2000	-0.791*** (0.154)	-0.777*** (0.153)	0.478 (0.732)
2004	-0.603*** (0.142)	-0.538*** (0.136)	0.369 (0.547)
2008	0.088 (0.117)	0.124 (0.115)	1.22* (0.654)
2012	-0.0481 (0.0934)	-0.04 (0.0866)	1.164 (0.712)
Constant	0.702*** (0.209)	0.861*** (0.258)	-0.379 (0.780)
Observations	6,072	6,072	6,072

Standard errors in parantheses.

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1