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# "Mind the Gap": Inequality Aversion and Mass Support for Protectionism

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Abstract

The past two decades were characterized by significant increases in income inequality within and between most countries and regions. During the same period, the world has witnessed unprecedented levels of capital flows and international trade. The existing literature on individual trade preference formation predominantly focuses on the impact of people's expectations of trade's impact on their economic welfare, including people's income and employment prospects. Largely overlooked by the literature is the possibility that individuals' trade attitudes are motivated by changes in the relative distribution of economic benefits across segments of society. I argue that growing income inequality, a macroeconomic phenomenon, can have adverse effects on mass support for the multilateral trading system, namely via people's attitudes toward income inequality. The empirical findings from this study show that concern for inequality is an important factor in explaining the dwindling support for liberal trade policies among the American public. Anxiety about widening economic disparity is not limited to income distribution in the national context, but individuals are also worried about the distribution of economic benefits in other countries. I employ a dual empirical strategy to test my hypotheses. As a first step, I use time series survey data from the American National Election Studies (ANES) to test the relationship between individuals' level of inequality aversion and attitudes toward trade liberalization. Second, a survey experiment design was implemented to substantiate the correlational relationship.

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## Introduction

The past two decades were characterized by significant increases in income inequality within and between most countries and regions. Examining income disparities between nations for the period 1950 to 2000 Milanovic (2005) reports that the highest-earning five percent of the world's population received one third of world income. Within countries, inequality rates are particularly high in the poorest countries of Africa and Latin America, but are also increasing in many advanced industrialized countries. Most notably, data on the long-run evolution of income inequality collected by Atkinson et al. (2011) indicate that in the United States the percentage share of the 1 percent richest households in total wealth has risen dramatically in recent years. During the same period, the world has witnessed unprecedented levels of capital flows and international trade.

While most analyses focus on the actual distributional effects of trade on income, we know little about the impact of rising inequality on people's public policy preference formation. Only in recent years, a few scholars have set out to examine the effect of rising inequality on people's redistribution preferences (Bartels 2005, McCall and Kenworthy 2009) or voter choice (Singer and Rosas 2007). However, to the best of my knowledge, the question remains unanswered with regards to the domain of individual trade preferences.[1] Studies on the sources of individual trade preference predominantly focus on people's expectations of trade's impact on their own economic welfare, including people's income and employment prospects. Largely overlooked by the literature is the possibility that individuals are motivated by changes in the relative distribution of economic benefits across segments of society. The neglect of people's inequality concern is surprising given the high salience of the trade-inequality linkage in public debates.

First, findings from various public opinion studies confirm that widening economic differences have not gone unnoticed by the public. Survey results show that there is already growing skepticism among citizens whether benefits of the global economy come at increasingly high costs, especially social justice. For example, in a 2008 BBC World Service Poll of 34'500 people, majorities in 27 out of the 34 countries[2] surveyed say that the benefits

[1] A paper by Lü et al. 2012 examines how self-centered inequity aversion influences individuals' willingness to support trade protection for a specific sector, but does not consider the impact of overall income distribution on individuals' trade attitudes. The authors argue that individual trade preferences are not driven by individuals' concern about general inequality levels in the society. Rather, people are only interested in the fairness of their own material payoff relative to others.

[2] The survey was conducted in Argentina, Australia, Brazil, Canada, Chile, China, Costa Rica, Egypt, El Salvador, France, Ghana, Germany, Great Britain, Guatemala, Honduras, India, Indonesia, Israel, Italy, Japan, Kenya, Lebanon, Mexico, Nicaragua, Nigeria, Panama, the Philippines, Portugal, Russia, South Korea, Spain, Turkey, United Arab Emirates, and the United States.

and burdens of "economic developments of the last few years" have not been shared fairly (BBC World Service 2008). Similarly, a survey[3] by the Pew Research Center 's Global Attitudes Project (2013) shows that economic inequality is a common concern for publics around the world. Notably, such sentiments are also expressed among US respondents who are widely believed to be accepting of "considerable disparities of income and wealth" (APSA Task Force 2004: 654). The survey reveals that almost half of Americans think that inequality is a very big problem in their society. An even larger proportion of the US public is convinced that the gap between the rich and the poor has increased in recent years.

Second, rising inequality does not only seem to translate into growing concerns about economic differences, but also appear to coincide with dwindling American support for free trade. In a recent survey conducted by the Pew Global Attitudes Project (2014) researchers found that the US public is among the group of countries that are most skeptical of international trade. In 2002, almost four in five Americans (78%) surveyed held the view that growing trade and business ties with other countries was a good thing. However, enthusiasm for international trade gradually waned in the consecutive years. By 2008, the US public's belief in the benefit of growing international business ties had fallen by 25 percentage points to 53%. This represents the largest decline in public support for international trade among the 47 countries surveyed. In the most recent poll US confidence in international trade has increased again, but still remains well below the global median support for international economic integration.

These numbers are suggestive. There is a risk that people's concerns about the distribution of trade's benefits may translate into protectionist sentiment and ultimately affect trade policies and trade flows. The extant literature on individual trade preference formation provides a limited basis for understanding the role that perceptions of inequality play in shaping people's attitudes toward trade. In this paper I seek to address this theoretical and empirical gap. Specifically, I propose that growing income inequality has adverse effects on mass support for the multilateral trading system, namely via people's attitudes toward income inequality.

The process of trade liberalization holds both positive and negative externalities. Put differently, changes in trade policy generate benefits or costs that influence the living standards of society as a whole while it does not economically affect the parties to the

[3] The survey was conducted in 39 countries: Argentina, Australia, Bolivia, Brazil, Britain, Canada, Chile, China, Czech Republic, Egypt, El Salvador, France, Germany, Ghana, Greece, Indonesia, Israel, Italy, Japan, Jordan, Kenya, Lebanon, Malaysia, Mexico, Nigeria, Pakistan, Philippines, Poland, Russia, Senegal, South Africa, South Korea, Spain, Tunisia, Turkey, Uganda, United States, Venezuela, and the Palestinian territories.

relevant transactions. Economists primarily emphasize the positive externalities of international trade in enhancing economic efficiency and promoting economic growth. Yet trade may also produce negative externalities, such as job insecurity, cultural dislocation, environmental damage and inequality. For those who are concerned about rising inequality, trade may be seen as violating norms of fairness and denying some segments of the society economic opportunities. Thus, if trade is seen as widening income inequality, individuals may not support open trade even when they are aware of the potential benefits of open markets. Generally, the extent to which people draw the link between income inequality and international trade depends on people's attitudes and awareness of inequality. People who are more concerned about inequality are more likely to associate international trade with income inequality, and thus are more likely to oppose international economic integration.

I employ a dual empirical strategy based on survey responses from the US public to test the relationship between individuals' inequality concerns and their attitude toward international trade. Testing the impact of inequality considerations on individual trade preferences among American respondents presents a hard test of the hypothesized relationship. This is because the US is typically known for its individualistic culture and relatively high tolerance for social and economic differences.

As a first step, I use time series survey data from the American National Election Studies (ANES) to test the relationship between individuals' level of inequality aversion and attitudes toward trade liberalization. The analysis spans over three survey rounds (2004, 2004 and 2012), which include a survey item on people's trade opinion as well as an item capturing individuals' perception of income inequality trends. I find that, indeed, citizens' concern for inequality has a significant effect on how they think about international trade, irrespective of their socio-economic status. In particular, the greater one's concern for inequality, the more likely one is to support limiting trade openness.

Free trade enthusiasts typically argue that individuals who support trade restrictions are motivated by national or personal self-interest rather than by sincere intentions to protect others from harm. Thus, in a second step I employ a survey experiment to substantiate the correlational relationship. In particular, I seek to demonstrate that opposition to international trade based on sincere concerns about rising income inequality is distinct from strictly employment-related protectionist demands. To this end, experiment participants are provided with interactive information treatments about rising income inequality inside and outside the United States. Varying the degree of these two types of inequality allows me to test what type of income inequality individuals react more strongly to. Participants to the experiment are

recruited via the crowd-sourcing platform Amazon Mechanical Turk for a sample size of 2000 participants from the US. The findings from the survey experiment show that rising income inequality abroad has the strongest effect in increasing respondents' demand for restricting international trade. This suggests that popular demand for restricting international trade is not simply a function of individuals' employment-related considerations, but is based on sincere concerns about trade-induced income inequality.

The paper is organized as follows. The next section briefly reviews the relevant literature and embeds the paper's key arguments into the broader literature. Section 3, then, introduces the paper's theoretical framework and hypothesis. This section establishes the causal mechanism underlying the stated hypothesis, i.e. *how* rising income inequality affects individuals' attitudes toward trade liberalization. In the following section, I first present the ANES data and the results from the survey analysis. I then introduce the experimental design and present the findings from the survey experiment. Finally, the paper concludes with a discussion of the policy implications of the findings and identifies areas for future research.

## The Growth-Equality Tradeoff in International Trade

A central tension in theories of distributive justice is the tradeoff between *equality of wealth distribution* and *efficiency of wealth generation* (Bowie 1971, Okun 1975). The growth-equality tradeoff has also become a prominent feature in the international trade debate. On the one hand, there is broad consensus among economists about the positive effects from international trade in increasing economic efficiency and promoting economic growth. At the same time, trade also creates distributive consequences and inequality, which likely comprise negative externalities for some individuals. Thus, absolute economic outcomes from trade liberalization as well as the distribution thereof are likely to be relevant for evaluating the overall economic effects of economic openness. As Hausman and McPherson (2006) note, it is not generally possible to separate questions concerning efficiency from distributional questions – i.e., between the size of the pie and the way it is sliced (Hausman and McPherson 2006).

Surprisingly, however, previous studies have primarily focused on the former aspect without adequate consideration of the latter. Confined to this perspective, individual preferences over international trade are understood as a reflection of how a given person has fared under economic openness. Such arguments are based on the standard models of trade liberalization: the Stolper-Samuelson (or Hecksher-Ohlin) model and the Ricardo-Viner, which focus on trade's implications on individuals' income and job prospects in explaining

individual attitudes toward international trade. Accordingly, if trade leads to the loss of one's job or lower income, an individual will oppose liberal trade policy. By contrast, if an individual experiences higher incomes under trade, this person will support international economic integration.

More recently, however, a growing literature, notably from experimental economics, shows that a substantial percentage of people are strongly motivated by *other-regarding preferences* in social interactions (Charness and Rabin 2002, Fehr and Schmidt 1999, Levitt and List 2007, Sobel 2005). This conclusion has followed observations of individuals' behavior in various experimental game interactions.[4] For example, under the standard assumption that individuals are rational and only care about how much money they get, and that both know about the other's rational intentions, the basic game structure of the Ultimatum Game predicts a non-cooperative outcome.[5] However, across a wide range of experiments, it has been reported that individuals offer much larger shares or tend to reject offers below a threshold well above the expected minimum. In general, respondents' motive for the rejection of positive, yet perceived as "low" offers, is that they view them as unfair.[6] These results indicate that individuals care not only about the absolute outcome, but also about how an intervention affects their respective outcome relative to others.

Existing studies on the relationship between international trade and inequality have thus far mainly focused on examining the association between countries' actual inequality trends and their trade tariffs. For example, using five-year-interval panel data from 73 countries, Hwang and Jung (2002) demonstrate that countries with higher initial asset inequality tend to impose higher average tariff rates. Similarly, looking at income inequality, Marktanner and Sayour (2009) show that countries' decision to liberalize trade is dependent on their respective level of income inequality. In particular, the authors find that countries with lower initial income inequality attained earlier membership to the General Agreement on Tariffs and Trade (GATT) than countries with higher levels of inequality. However, given that levels of income inequality reflect a significant component of a given country's overall economic condition, namely the distribution of the country's wealth among its population, it

[4] Most of these experiments examined individuals' behavior through the Ultimatum Game by Güth et al. (1982) in which a pair of subjects, a proposer and a responder, has to agree on the division of a fixed sum of money. While the proposer can make a proposal with regards to how to divide the amount, the responder can only either accept or reject the proposed division. If the responder rejects, both players receive nothing. By contrast, if the responder accepts, the proposal is implemented.

[5] In the case of the Ultimatum game it is predicted that the responder accepts any positive amount of money and, hence, the proposer gives the responder the smallest money unit and keeps the rest to herself.

[6] See Camerer (2003) for a comprehensive overview and discussion of experimental findings.

is plausible to assume that inequality developments can have a strong impact on people's evaluations of trade's economic impact.

## Rising Income Inequality and Individual Trade Preferences

Sociotropic models of individual trade preferences posit that individuals assess the impact of international trade based on collective-level information about the country's economic conditions (Kinder and Kiewiet 1981, Mansfield and Mutz 2009). As Mansfield and Mutz put it: "In the case of trade preferences, if available information convinces a person that many in the United States are being adversely affected by free trade, even if he is not, it will be the former, sociotropic perception that shapes his trade policy preferences (…)." (2009: 432-433). Some scholars submit that the alternative framework advocating egotropic evaluations of international trade based on people's personal economic situation pose a very high cognitive demand on individuals (Fordham and Kleinberg 2012, Schaffer and Spilker 2013). More specifically, it is unrealistic to assume that individuals would engage in complicated cost-benefit analyses to anticipate the likely impact of free trade on their employment status or income level. In addition, Mansfield and Mutz state that individuals find it difficult to associate personal economic experiences with government policy (2009: 432). Sears and Funk further add that in the case of the US, national-level outcomes are likely to play an even stronger role because American citizens tend to show reluctance in attributing their personal successes or failures to government policy or broader societal processes.

To test the impact of sociotropic considerations on people's trade opinions most scholarly analyses rely on people's self-reported perceptions of the country's economic performance. For example, to measure sociotropic concern Mansfield and Mutz (2009) ask survey respondents to state whether international trade has helped or hurt the economy as a whole. While this approach provides a direct indication of people's overall concern about the national economy, we cannot disentangle which aspects of the country's economic condition people refer to when thinking about the potential implications of trade openness. Surveying existing public opinion studies on international trade Scheve and Slaughter (2006) note that public concern about economic globalization is predominantly tied to labor-market considerations. Specifically, high levels of unemployment may heighten individual concerns about the employment risks associated with liberal trade policies. In a cross-country comparison, Scheve and Slaughter (2006) find that protectionist sentiments are stronger in countries with higher unemployment rates. At the micro level, Hiscox (2006) finds that

providing respondents with information linking trade to the possibility of job losses, significantly decreases people's support for trade liberalization.

Notwithstanding the importance of the country's labor market condition, the influence of other macroeconomic indicators, including income inequality trends, on people's trade attitudes has thus far not been adequately considered in existing studies. Especially in the case of the US, the exclusion of inequality may be due to the commonly held view that the prevalence of individualism in US culture encourages exceptionally high tolerance for social and economic differences. However, observing changes in inequality attitudes among the US public over time, McCall and Kenworthy (2009) do not find much empirical support for the postulated American indifference to inequality trends. Rather, the evidence suggests that salience of income inequality issues is on the rise. The authors assert that public concern about income inequality was indeed relatively low as the general trend toward rising inequality began to emerge in the late 1980s. However, public awareness over the issue of income differences grew over the 1990s as income inequality continued to increase beyond a temporary blip, and the issue gained salience in both elite and public discourse (McCall and Kenworthy 2009: 462). Concern over rising income inequality is still high today and is not likely to lose ground in the public debate in the foreseeable future. As President Obama recently declared: "Inequality is the defining challenge of our time".[7]

The assertion that trade liberalization exacerbates inequality between and within countries is readily employed in anti-globalization narratives. As anti-globalization activist Noam Chomsky puts it: "Inequality is soaring through the globalization period – within countries and across countries."[8] Similarly, *The Guardian* journalist Walter Schwarz writes: "(…) all the main parties support nonstop expansion in world trade and services although we all know it makes rich people richer and poor people poorer."[9] However, while such rhetoric is compelling, rising inequality is not automatically attributed to increases in international trade, but will depend on people's concern for inequality. In other words, the extent and readiness with which individuals link information about inequality with international trade is conditioned by their inequality attitudes. People who are more concerned about inequality tend to assign greater weight to the economic implications of trade on the country as a whole. The distribution of income as reflected in a country's income inequality trends, therefore, constitutes an important factor in the sociotropic evaluation of trade liberalization of the

[7] See http://www.whitehouse.gov/the-press-office/2013/12/04/remarks-president-economic-mobility.
[8] Cited in The New York Times. "The Rich Get Rich and the Poor Get Poorer. Or Do They?" August 15, 2002: http://www.nytimes.com/2002/08/15/business/15SCEN.html, last accessed: April 25 2014.
[9] Cited in Dollar (2004).

highly concerned. This leads them to react more sensitively to information about income disparities and to more likely use such information to update their evaluations of international trade. When individuals perceive the distribution of income to be unfairly distributed, they are likely to attribute such developments to international trade. This, in turn, decreases their support for international trade. In contrast, individuals who are less worried about inequality are less likely to connect inequality trends with economic integration. Rather, they tend to focus on the absolute aggregate economic outcomes of trade, and are thus more likely to take other macroeconomic indicators, such as unemployment rates or the country's gross domestic product, into account to evaluate the effects of international trade. In the next section I examine people's underlying motives to incorporate inequality considerations in forming their individual trade preferences.

## Concern for Inequality and Mass Support for Protectionism

To the extent that individuals with high concerns about inequality connect inequality trends with the process of trade liberalization, what are the motivations underlying individuals' sociotropic evaluation of international trade based on distributional consequences? In what follows I conjecture that interpretations of trade's impact on the overall distribution of income are related to concerns over general norms of fairness and the perceived social costs of inequality.[10]

First, individuals might evaluate the distribution of wealth in the society from the perspective of distributive fairness. Studies from political psychology research find that individuals tend to follow the "do-no-harm heuristic" when evaluating socioeconomic reform measures (Baron 1995, 1996, Haferkamp et al. 2009, Royzman and Baron 2002). According to Baron (1995), the do-no-harm principle can be described as a general rule against taking an action that results in a worse outcome for someone else.[11] This entails not causing harm to others or protecting others from harm. But what, in fact, qualifies as harm? Haferkamp et al. argue that generally harms are seen as any form of deviation that creates a reduction from the status quo according to which "people assume that a rule or a certain distribution of resources

[10] Singer and Rosas (2007) propose a similar mechanism through which changes in a country's income distribution drive voter choices.

[11] The do-no-harm is closely related to the concept of Pareto efficiency in economics and public choice literature. A Pareto improvement refers to a change in the distribution of resources that results in at least one individual being better off without making any other individual worse off. An allocation is then defined as "Pareto efficient" or "Pareto optimal" when no further Pareto improvements can be made. Applying the (strong) Pareto criterion and the do-no-harm principle, i.e. to only consider options that lead to Pareto improvements, means that no change is justified as long as someone is hurt under this change, regardless of the benefit that may be realized for others. This, however, can lead to a status quo bias.

that has been established over time must automatically be fair." (2009: 530). As argued above, open trade is known to create winners and losers. For example, free trade may lead to the loss of employment for unskilled workers in developed, skill-abundant countries as a result of increased competition encouraged by liberal trade policies. Hence, gains from economic openness, including personal gains to the individual may not justify these losses to others.

A further argument related to the do-no-harm heuristic is that people have difficulty in comparing the magnitude of good and harm (Baron et al. 2006, Baron and Kemp 2004, Bazerman et al. 2000, Kemp 2007). In evaluating the loss and gains from international trade individuals' assessments may be more strongly influenced by the potential negative externalities that some groups of people are faced with as a result of economic openness. This argument partly builds on findings from research on prospect theory, which suggests that in decision-making perceived losses loom larger than gains (Kahneman and Tversky 1984). In other words, the dissatisfaction associated with loss is greater than the pleasure associated with the same amount of gains. However, the argument departs from the theory's conventional prediction that in the domain of losses self-interest should play a stronger role. Rather, individuals view avoiding losses to others as more important as maximizing their own gains. Thus, even when trade liberalization leads to overall economic efficiency and growth for the country as a whole, people may oppose open trade if the process is perceived to result in losses for some. Hence, even when the aggregate gains from trade openness vastly outweigh the losses, people may prefer trade protectionism because they see the losses as more salient. Overall, it can be argued that perception of loss accrued to certain segments in the society contributing to rising income disparities can serve as an important cue for individuals when forming their attitudes toward international trade.

An alternative motive underlying people's concern over the distribution of incomes across segments of the society is the anxiety over the social costs associated with rising income inequality. As many studies show, large economic differences can be linked to a series of bad social outcomes (Pogge 2007). For example, higher inequality has been found to be connected to higher crime rates, such as homicide and robbery (Demombynes and Ozler 2005, Kelly 2000, Wade 2007: 116). Furthermore, the vast literature on democratic transition asserts that large gaps between classes provides a fertile ground for popular mobilizations and protests which can result in other forms of political and social instability (Acemoglu and Robinson 2005, Muller 1985, Przeworski 1992). The initially high receptiveness for the

Occupy Wall Street among publics across the world visibly demonstrates the mobilizing power of concerns over social and economic inequality.

In sum, people might object to income disparities for various reasons. In particular, objections against high inequality out of fears of the anticipated social costs suggest that people's anxieties about wealth distribution are not solely motivated by altruistic motives. It is important to note that these motivations are not mutually exclusive. People who oppose rising income inequality based on considerations of general norms of fairness may be equally worried about rising inequality generating high social costs. It can therefore be assumed that when individuals perceive trade as contributing to growing income disparities, they will oppose trade liberalization. To what extent individuals make this association between economic integration and growing inequality depends on each person's attitude toward inequality. Hence, the specific hypothesis to be tested is: *People who are more concerned about income inequality are more likely to support protectionist measures.* The next section presents the empirical strategy I employed to test this hypothesis.

## Data and Empirical Strategy

To test the impact of people's perceptions of income inequality on their attitudes toward trade liberalization, I proceed in two steps. As a first step, using ANES survey data for three consecutive rounds (2004, 2008 and 2012), I carry out an empirical test of how individuals' perception of inequality conditions their level of support for trade liberalization. In a second step, I use a survey-experiment design to examine how respondents react to information about domestic rising income inequality and growing income gaps abroad. This tests to what extent this form of support for trade restrictions is distinct from the conventional understanding of protectionist preferences to safeguard domestic jobs. To this end, I provide experiment participants with information about rising income inequality within the US and growing income gaps in other parts of the world. In the following subsections I first present the design of the ANES dataset and the results from the survey data analysis. Setup, design and corresponding analysis of the survey experiment are reported in the following subsection.

### *Survey Data Analysis*

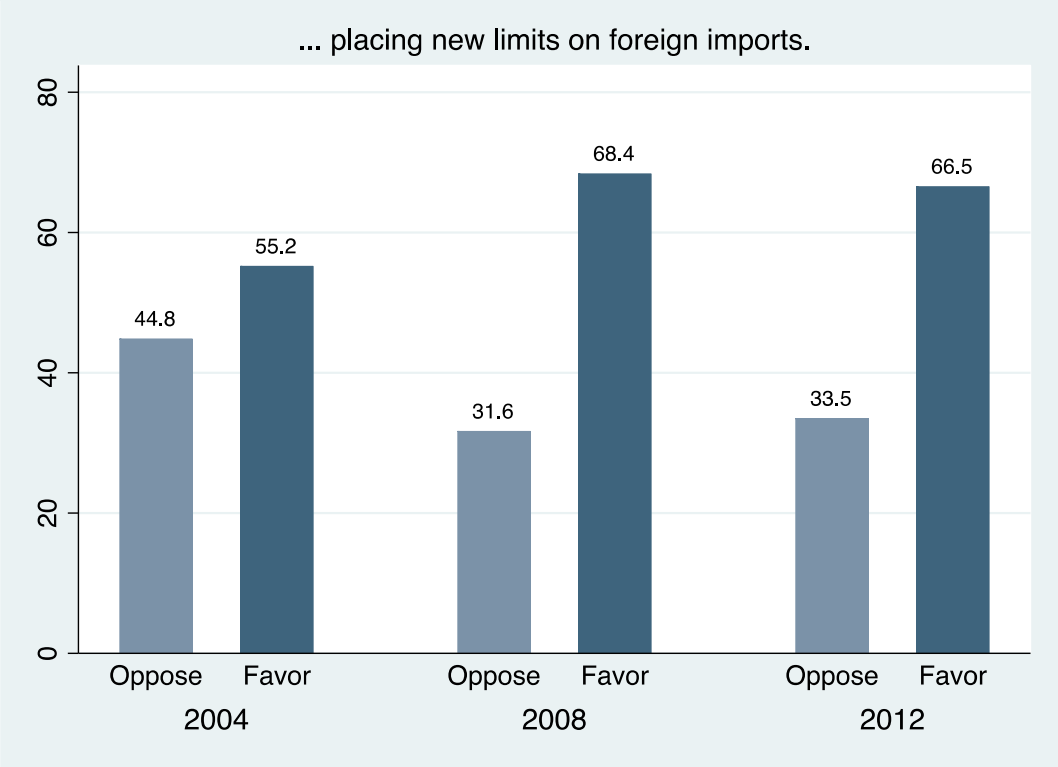
Using ANES survey data for the years 2004, 2008 and 2012, I carry out an empirical test of how individuals' perception of inequality influences their level of support for trade

liberalization. Survey responses from the three years are pooled to a total sample of 9448 respondents. Certainly, it would have been ideal to test the above hypothesis for a longer time period. However, while earlier survey waves asked respondents to state their view on foreign imports, these surveys did not include questions on attitudes about inequality with explicit reference to income inequality[12] (see also McCall and Kenworthy 2009: 461). The three survey waves employed in this study contain both a question on individuals' attitude toward trade liberalization and a question that taps respondents' reported perception of income inequality.

To measure respondents' trade preference the ANES asks: "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?" After deleting non-responses, including "Haven't thought much about this" and "Don't know", I generated a binary variable, *Protectionism*, set equal to 1 if the respondent favors stricter limits; at the other end, a score of 0 indicates opposition to such trade limits. Figure 1 shows the overall picture of protectionist sentiment for the time period under study. In general, the numbers suggest that there is relatively high demand for some trade restriction among the US public. In each year, the share of respondents who favor placing limits on foreign imports is higher than the share of people who oppose such a policy measure. In 2004, respondents seem to be split on the issue with almost half of the respondents indicating support for free trade (44.8%), while the other half favors placing new limits on foreign imports (55.2%). In the following survey wave in 2008, the percentage of respondents supporting the introduction of import restrictions increased significantly to 68.4%. In the latest survey of 2012, protectionist demand remains relatively high with a negligible decrease to 66.5%.

[12] Rather, the majority of the questions on inequality attitudes included in the ANES capture respondents' view on equality of opportunity (e.g., equal chances) and formal equality (e.g., equal rights and treatments). Earlier survey rounds do not even contain questions on income inequality (e.g., income disparities).

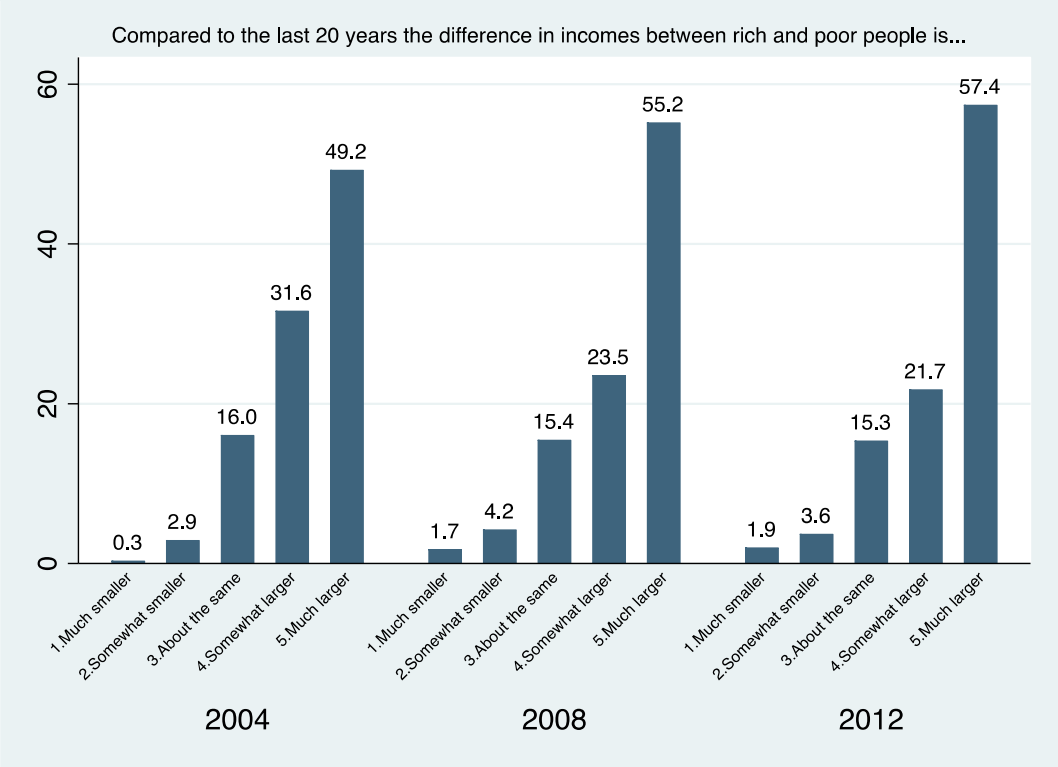
**Figure 1**: Level of Protectionist Sentiment by Year




*Source*: American National Election Studies Time Series Study 2004, 2008, 2012.

To gauge individuals' perception of inequality, respondents are asked to indicate, on a 1-5 scale, how in their view the gap between and rich and poor people has developed over the past 20 years. In constructing the independent variable, *Inequality*, I recoded this measure in such a way that higher values correspond to a greater awareness of rising income disparities. Figure 2 shows the proportion of respondents in each of the five categories of *Inequality* distributed across the given survey years. The graph illustrates that in all three survey waves, the majority of respondents perceive income gaps to be "much larger" as compared to 20 years ago. In 2012, the share of respondents who held this view was larger than in 2008. This picture reverses when one looks at the share of respondents who think that the income gap is "somewhat larger". A larger proportion of respondents who notice a moderate increase in income disparities was reported in 2004 than in 2012. In the category capturing respondents who consider the income gap to have remained "about the same" as compared to the last 20 years, there are no significant differences across the years under study.

**Figure 2**: Distribution of Concern for Inequality 2004-2012




*Source:* American National Election Studies Time Series Study 2004, 2008, 2012.

Finally, the ANES dataset also contains information on respondents' socio-demographic characteristics, including age, gender, education, income, employment status, and political ideology. I control for the effects of these variables in the analysis. Moreover, I also control for the effect of respondents' subjective evaluation of the country's economic condition. Respondents' personal assessment of the country's economic performance is captured by two variables. One variable asks respondents to report the perceived change between the country's economic state in the past 12 months and the current state. A second measure indicates respondents' prediction of the country's economic performance in the coming 12 months. All items included in the analysis are shown in Appendix Table A1.

***Results of Survey***

The results of the logistic regression, presented as estimated marginal effects in Table 1, lend empirical support for the hypothesized positive relationship between individuals' level of inequality concern and demand for limiting trade. As the finding from the bivariate regression in Column 1 shows, the estimated effect of individuals' inequality perceptions is statistically significant and positive. The more people perceive economic differences between the rich and

the poor to be widening, the more likely they are to oppose economic openness. This finding remains robust after controlling for respondents' socio-demographic attributes.

**Table 1**: Predictors of Protectionist Sentiment

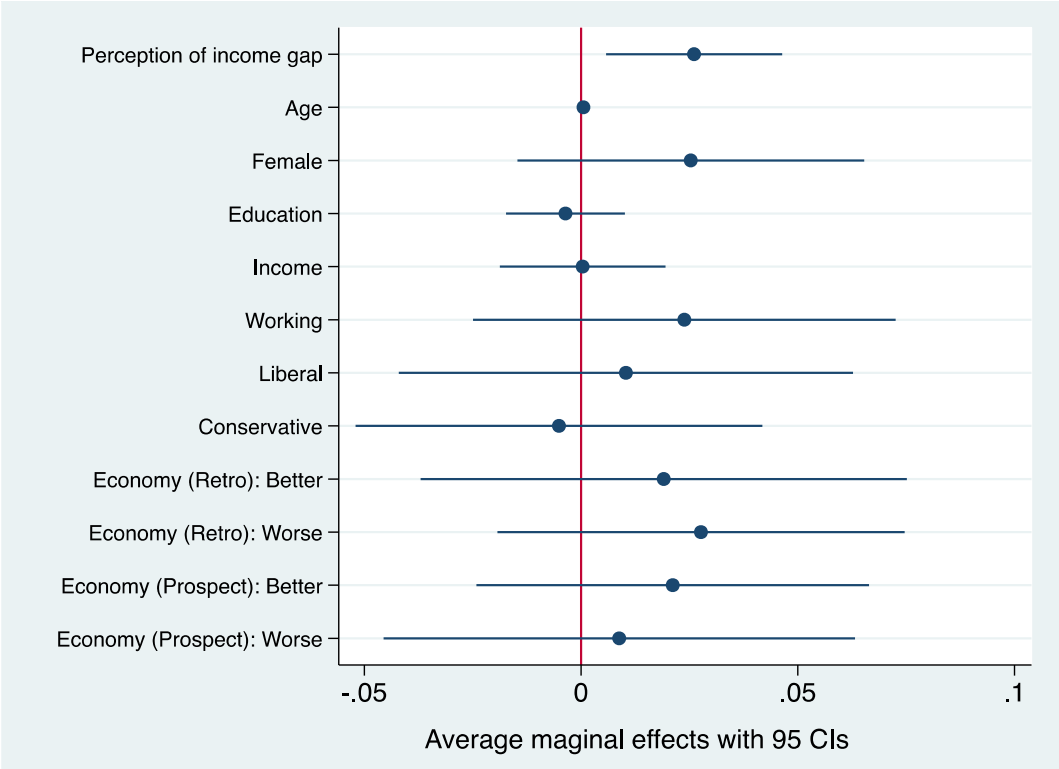
| VARIABLES | (1) | (2) | (3) |
|---|---|---|---|
| Perception of inequality | 0.0342*** | 0.0340*** | 0.0261** |
| | (0.0072) | (0.0077) | (0.0104) |
| Age | | 0.0005 | 0.0005 |
| | | (0.0005) | (0.0007) |
| Female | | 0.0187 | 0.0253 |
| | | (0.0154) | (0.0204) |
| Education | | -0.0081 | -0.0036 |
| | | (0.0051) | (0.007) |
| Income | | -0.0015 | 0.0004 |
| | | (0.0075) | (0.0097) |
| Working | | 0.0205 | 0.0238 |
| | | (0.0185) | (0.0249) |
| Liberal | | | 0.0103 |
| | | | (0.0267) |
| Conservative | | | -0.0051 |
| | | | (0.0239) |
| Country's economy (last 12 months): Better | | | 0.0191 |
| | | | (0.0286) |
| Country's economy (last 12 months): Worse | | | 0.0277 |
| | | | (0.024) |
| Country's economy (next 12 months): Better | | | 0.0211 |
| | | | (0.0231) |
| Country's economy (next 12 months): Worse | | | 0.0088 |
| | | | (0.0277) |
| Observations | 4,489 | 3,958 | 2,285 |

*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.

Column 2 reports the results from the multivariate regression in which I include individual characteristics typically classified as economic determinants of individual trade preferences. For example, following the H-O logic education is often used as a proxy of individuals' skill level. Again, respondents' reported perception of rising income disparities is significantly associated with their trade preference. Holding all variables at their means, a positive change of one standard deviation in the *Inequality* concern measure increases the probability of the respondent favoring trade restrictions by 3,4 percentage points. None of the other control variables included in the analysis reaches statistical significance. In particular, while

economists have often attributed protectionist sentiments to individuals' ignorance or economic literacy, I find that the effect of inequality concern still remains significant after the inclusion of respondent's educational attainment.

**Figure 3**: Average Marginal Effects on Protectionist Sentiment




*Note*: (1) The dots represent the estimated marginal effects from the logit regression for each predictor variable specified in the model (Column 3 of Table 1). (2) Whiskers indicate the 95% confidence intervals around the means.

In Column 3 I add respondents' political ideology as well as subjective evaluations of the country's economic condition both in retrospective and prospective terms to the multivariate regression. For ease of interpretation, I plot the regression coefficients of the multivariate regression with all predictor variables in Figure 3. As the results show, the association between individual level of inequality concern and support for limits of foreign imports remains statistically significant. *Age* has almost no effect on respondents' stated view on foreign imports. The signs of the political *Ideology* variables are consistent with the widely assumed direction, with Liberals typically being more supportive trade restrictions as compared to people who identify more strongly with Conservatives. Yet, as the confidence intervals show, the effects are not statistically different from zero. Interestingly, both positive and negative evaluations of the country's economic condition are associated with an increase in protectionist demand. However, the coefficients are not statistically significant. Overall,

these findings indicate that people's concern for inequality is instrumental in determining their preferences towards trade liberalization, independent of their socio-economic status. In the next section, I present the design and results from the survey experiment.

***Survey Experiment***

The emerging literature on fair trade preferences shows that some individuals oppose free trade because of sincere concerns about potential negative effects of trade on labor or environmental conditions (Bechtel et al. 2012, Ehrlich 2010). However, advocates of free market competition contend that fair trade preferences in fact reflect protectionism in disguise. For example, Brown et al. argue that demands for higher labor standards abroad merely aim at protecting domestic jobs from more competitive foreign workers (1996: 266). With regards to the demand for linking international trade to environmental protection standards Bhagwati and Srinivasan (1996) assert that such claims simply aim at protecting domestic businesses who face higher costs in meeting higher domestic standards. Bhagwati concludes that "protectionists see great value in invoking 'unfairness' of trade as an argument for getting protection: it is likely to be more successful than simply claiming that you cannot hack it and therefore need protection." (1995: 746) Similarly, demands for restricting or regulating free trade out of concerns over potential negative effects of trade on income distribution are also typically discarded as a disguise of employment-related protectionism.

In order to show that opposition to international trade is based on sincere beliefs about the potential influence of trade in exacerbating income disparities I test to what extent individuals' trade preferences are also influenced by income inequality trends outside their own country. If fair trade preferences indeed simply reflect individuals' concerns over domestic jobs then we should observe economic differences in other countries to play no significant role in individuals' evaluation of international trade. In contrast, if concerns about income inequality outside the US significantly affects respondents' attitude toward trade this would lend support to the existence of fair trade preferences that are motivated by non-employment related concerns. Opposition to international trade may thus be motivated by the ambition to protect foreign workers from unjust exploitation. For instance, Goldberg and Pavnik (2007) observe that economic globalization has not lived up to the expectation of increasing the income of the less skilled in developing countries. To the contrary, the authors provide empirical evidence showing that these less skilled workers, who are presumed to be the locally abundant factor and should thus benefit most from economic openness, are not better off after trade liberalization. In contrast, the image of sweatshop plants with inhumane

working conditions for a minimal wage is often cited as a drastic consequence of the "race to the bottom" induced by unfettered trade. Especially in the US context, citizens may consider widening economic gaps in other parts of the world (in particular less developed countries) as a violation of equality of opportunity, and may therefore oppose further economic openness irrespective of domestic job concerns. To test whether individuals' trade preferences are influenced by sincere concerns about rising income inequality I provide respondents with information about the income distribution in the US and in one part of the developing world. I expect that the information about rising income inequality outside the US is at least as important as the information on domestic income inequality.

Participants to the survey experiment were recruited via the crowd-sourcing platform Amazon Mechanical Turk (AMT). While the most obvious advantages of AMT are the ease and speed of obtaining relatively large samples at relatively low costs, some scholars have raised doubts concerning the representativeness of AMT samples.[13] In conducting a large survey of over 10,000 respondents from AMT, Kuziemko et al. (2013) acknowledge that selection into their survey is not representative of the US population. However, comparing their AMT sample to a nationally representative sample of US adults contacted by Columbia Broadcasting System (CBS), they do not find large differences in the distribution of respondents' socio-demographic characteristics between the two samples. Comparing the summary statistics from my sample to the American Community Survey (ACS) sample shows that respondents from the AMT sample are younger and more educated (see Appendix Table A2). However, on other key demographic characteristics, including gender, employment status and household income, my sample closely resembles the distribution in the ACS sample. A second limitation inherent in AMT samples is the fact that respondents select themselves into the survey in contrast to a randomly drawn sample from the population. The results from should thus be interpreted in light of these limitations.

In designing the survey experiment I took several steps to ensure the validity of the responses from AMT respondents. First, respondents who took the pilot survey[14] were excluded from participation in the final survey. Second, while respondents cannot be forced into spending a pre-defined time on the survey, I excluded respondents from the analysis who completed the survey in less than 5 minutes as well as respondents who took more than 30

[13] See a blog entry by Dan Kahan, http://www.culturalcognition.net/blog/2013/7/10/fooled-twice-shame-on-who-problems-with-mechanical-turk-stud.html, July 2013. For further discussions of the demographics of AMT users, see Ross et al. (2010) and Berinsky et al. (2012).

[14] I implemented a pilot round in order to test the survey experiment design and in order to identify potential technical difficulties. The pilot survey was implemented March 25th 2015 and had a sample of 500 respondents.

minutes to finish the survey.[15] In addition, I also excluded respondents from the analysis who did not engage fully with the treatment conditions.[16]

Overall, the survey experiment was divided into five parts. In the first part, respondents are asked to provide information on some standard demographic characteristics, including age, gender and political ideology. This was followed by the randomly assigned treatment. Except for a control group receiving no information, respondents assigned to a treatment group received information about inequality trends. In general, the goal of the information treatments was to raise individuals' awareness and concern about inequality. Kuziemko et al. (2013) show that encouraging participants to engage with the provided information treatments in an interactive way presents an effective way to heighten people's awareness about income inequality and to view "inequality as a very serious problem". More specifically, in their survey experiment respondents were asked to state their household income and were then informed what share of households earned more or less than the respondent's household. The application also allowed the participants to explore the share of households below or above any other reference income set freely by the respondent. While the latter element holds the potential to provide participants with a greater volume of information and hence enhances the treatment (depending on how intensively the participant makes use of the invitation to explore income levels other than her own), it also creates a somewhat uncontrolled treatment. In particular, since there is no restriction with regards to the extent of exposure and the substantive income level for which the respondent is supposed to experience the share of household below and above, we cannot know how intensively the participant was "treated". This may result in somewhat different treatment conditions for each participant. In designing the information treatments I therefore limited the interactive application to some pre-defined values. I describe the interactive application in greater detail further below.

To study people's susceptibility to different types of information on inequality and how this ultimately affects their trade preferences, I generated four treatment conditions. Each treatment condition emphasizes either an increase in income inequality within the United States in the last 20 years (*Domestic Inequality*), or a rise in income disparities in a

[15] Results from the pilot survey indicate that the minimum time to complete the survey is around 5 minutes, while the maximum amount of time required to complete the survey is about 25 minutes. Therefore, I excluded respondents who finished the survey in less than 5 minutes and those who took more than 30 minutes.

[16] The treatment condition pages were programmed in such a way that an error message would appear if the respondent just clicked through the page without answering the questions. However, instead of prohibiting respondents from advancing to the next questions of the survey, respondents were taken to the next page at the third attempt to click on the continue button. If a respondent did not answer all the questions from the treatment page correctly, her answers were excluded from the analysis.

developing country region[17] *(Global Inequality*). To be able to compare the substantive difference between these two types of inequality, I varied the salience of the information about inequality resulting in a high and a low salience treatment condition for each type of inequality and combined them. Hence, in each treatment condition respondents receive information on both types of inequality. This allows me to single out the effect of domestic inequality information treatment when domestic inequality varies between two treatment conditions (from low salience to high salience) while holding global inequality constant. Conversely, in order to identify the effect of the global inequality information treatment I compare the difference in protectionist sentiment between the two treatment conditions in which global inequality varies, while domestic inequality remains constant. To mitigate unintended ordering effects, in each treatment condition I randomized the order in which each type of inequality would appear. Table 2 presents the treatment conditions.[18] Note that the treatment conditions did not prime respondents to link rising inequality to international trade. No reference to international trade was made in the information treatments.

**Table 2**: Overview of Treatment Conditions

| | | Global Inequality | |
|---|---|---|---|
| | | *High: Interactive exploration of income distribution in a developing region* | *Low: Standard text reporting the rise of income inequality in the a developing region* |
| Domestic Inequality | *High: Interactive exploration of US income distribution* | **Treatment 1** Domestic High – Global High | **Treatment 2** Domestic High – Global Low |
| | *Low: Standard text reporting the rise of income inequality in the US* | **Treatment 3** Domestic Low – Global High | **Treatment 4** Domestic Low – Global Low |

To increase respondents' awareness of *domestic inequality* I ask respondents to report the share of US households that are below or above a specified household income level by using an interactive converter box. Once the respondent types in the income amount specified in the question text into this converter box, she obtains information on how many percent of US households earn more or less than the inputted amount. The respondent is then asked to type the amount into a prepared answer box. Experiment participants received six questions of this kind. While the first three questions aim at demonstrating the vast number of US households who make less than the specified income levels (which were all below the median), the last three numbers are intended to show the relatively large proportion of US households who

[17] Respondents were presented with randomized information about the income distribution in Sub-Saharan Africa or South Asia.
[18] The survey can be reviewed online at: https://eu.qualtrics.com/SE/?SID=SV_7NT0mIbVITnZkEJ&Preview=Survey&BrandID=ethzurichenv.

have income levels much higher than the country's median.[19] Figure A1 of the Appendix provides a screenshot of this treatment condition.

In the *global inequality* treatment respondents were asked to report the amount of income a household would make if inequality had been shared equally. To this end, survey participants enter the household's current income specified in the question text into the prepared converter box to obtain the answer. Again, respondents answered six questions. The first three questions reveal that households with very low levels of income would have earned much more if incomes had been equally distributed. Conversely, the last three questions showed that households who currently enjoy relatively high incomes would have earned much lower incomes. These interactive features were included in the treatment conditions displaying high salience of inequality. This treatment condition is illustrated through the screenshot shown in Figure A2 of the Appendix.

In the low-salience conditions I simply ask respondents to read a short text mentioning that income inequalities has increased with richer households receiving more than middle-income and poor households. To highlight the type of inequality, global versus domestic, I presented a map of the US and a world map, respectively (see Figure A3 of the Appendix).

Following the treatment conditions, respondents were asked to provide their opinions on some trade-related questions. Most studies rely on a single-item indicator to measure individual trade preference (including the ANES item employed in the first-step analysis). However, using multiple indicators takes into account that international trade is a multifaceted phenomenon. Thus, individual attitudes about this process are also likely to reflect individuals' considerations about several dimensions of international trade. First, I presented respondents with seven word pairs, which represent some of the common negative and positive characterizations of international trade. Respondents were asked to use these word pairs to indicate their spontaneous association when thinking about trade more generally. The next items capture respondents' policy preferences with regards to international trade, i.e. whether they think the government should encourage or discourage international trade. Using confirmatory factor analysis (CFA) I created an index of support for protectionism. The values are standardized on a 0-1 scale with higher values representing stronger support for limiting international trade. Table 3 shows that all ten items load satisfactorily on one factor and add substantively to the latent concept of individual attitude toward trade.

[19] Real income data are taken from the U.S. Census Bureau's Current Population Survey 2014.

**Table 3**: Index of Public Support for Protectionism

| Variable | Survey Item | Factor loadings | Weight |
|---|---|---|---|
| *Protect1* Cronbach α = 0.92 | Q1 Generally, what is your feeling when you think about international trade? Fair-Unfair | 0.677 | 0.071 |
| | Q2 Generally, what is your feeling when you think about international trade? Good-Bad | 0.835 | 0.186 |
| | Q3 Generally, what is your feeling when you think about international trade? Opportunity-Threat | 0.828 | 0.151 |
| | Q4 Generally, what is your feeling when you think about international trade? Job-Unemployment | 0.768 | 0.109 |
| | Q5 Generally, what is your feeling when you think about international trade? Hope-Fear | 0.74 | 0.116 |
| | Q6 Generally, what is your feeling when you think about international trade? Wealth-Poverty | 0.734 | 0.109 |
| | Q7 Generally, what is your feeling when you think about international trade? Beneficial-Harmful | 0.859 | 0.19 |
| | Q8 Do you feel the process of increasing trade between countries has been going too fast, too slowly or at the righth pace? | 0.5 | 0.047 |
| | Q9 The government should restrict access to the US market to limit trade with other countries. | 0.664 | 0.11 |
| | Q10 The government should open the economy to increase trade with other countries. | 0.717 | 0.141 |

For the remainder of the survey, participants were asked to provide further information on other possible determinants of trade attitudes. In addition to the standard variables such as *age, gender, political ideology*, *education, employment status,* and *income*, I also control for respondents' level of *economic literacy*. Caplan (2002, 2007), for example, ascribes protectionist sentiments to a mere reflection of ignorance or irrationality of the public. More specifically, the author argues that citizens have systematically biased beliefs about the economy, which leads them to vote for protection although they in fact prefer the outcomes of free trade (2007: 23-50). In other words, people would be as favorable toward free trade as economists if they were able to understand the concept of the "invisible hand" of the market and the concept of comparative advantage. By controlling for respondents' economic training I test to what extent trade attitudes are dependent on respondents' economic literacy.

Furthermore, Mansfield and Mutz (2009) find that beliefs about the national economy have a significant effect on trade opinions. To control for evaluations of the country's economic conditions, I create an index, *National Economy*, by asking respondents to evaluate the national economy's current state, its development over the past 12 months and respondents' expectations with regards to the next 12 months.

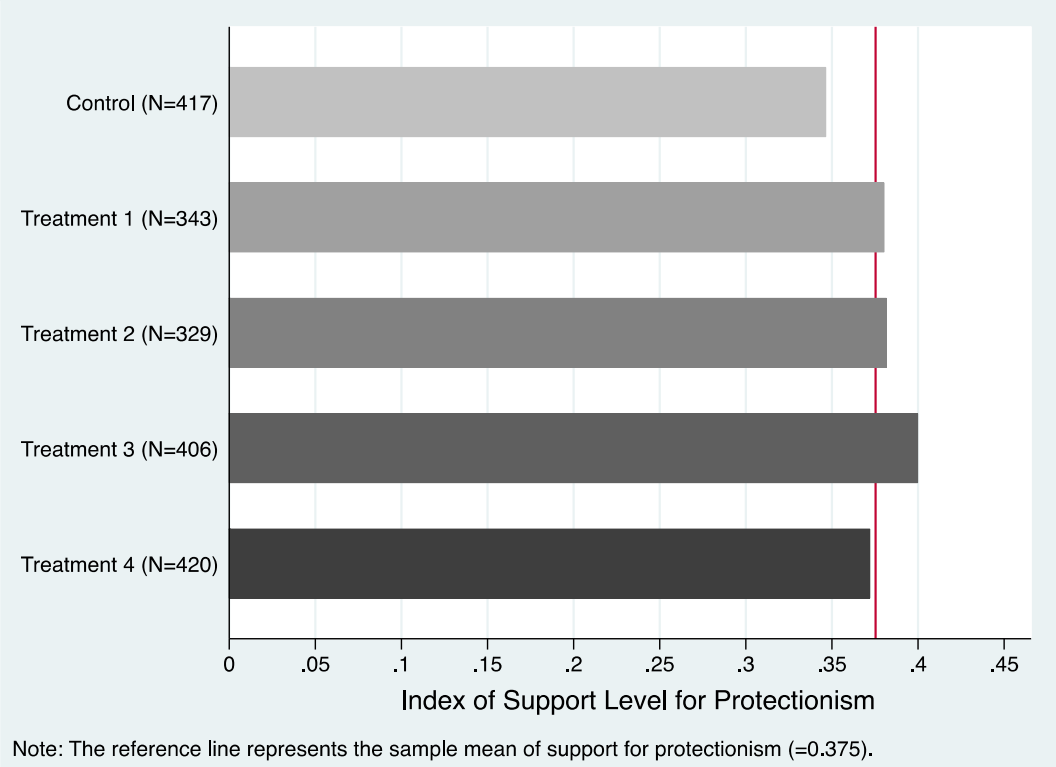
Next to the effects broadly connected to economic expectations of international trade, various studies have emphasized the influence of non-economic factors in determining people's trade preferences. For example, some studies have documented the impact of nationalist feelings on trade preference formation (Mayda and Rodrik 2005, O'Rourke and Sinnott 2001). People who express stronger nationalist feelings have been found to be more likely to endorse protectionism. The variable *Nationalism* is created using responses to the question whether the respondent thinks the US should defend its national interest even if this may lead to conflict with other countries. To capture respondents' sympathy toward *collectivism*, I ask to what extent they agree with the statement that individuals should put their interest second for the sake of the society. In another survey experiment, Ehrlich and Maestas (2010) demonstrate that risk orientation plays an important role in shaping individual

trade policy preferences. In particular, when studying the effects of inequality aversion Kroll and Davidovitz (2003) advise to control for the effect of risk aversion. This is because any given reduction in the dispersion of income in an economy not only reduces the inequality between individuals in the economy, but also diminishes the risk to individuals entering the economy (Kroll and Davidovitz 2003: 19). The question therefore arises whether the preference for an egalitarian distribution is motivated by aversion to inequality or aversion to risk. Following Ehrlich and Maestas (2009) I measure individuals' risk orientation by asking respondents how comfortable (uncomfortable) they feel when taking decisions in different situations. Question wording and coding schemes of the variables mentioned here are provided in Appendix Table A3.

***Results***

The main explanatory variable, treatment membership (*Treatment*), is a nominal variable with five categories: Control (0), National high – Global high (1), National high – Global low (2), National low – Global high (3), and National low – Global low (4). I first examine the overall protectionist sentiment among the respondents. As Figure 4 shows, average support for protectionism is at 0.375. The graphical inspection further reveals that respondents consistently report stronger protectionist sentiments when they were assigned to a treatment group as compared to respondents from the control group. Respondents who did not receive any information on rising income inequality show considerably less favorable attitudes toward restricting international trade than the reported average level of support for protectionism among all respondents. Among the treatment condition members, respondents who were exposed to highly salient information about rising global income inequality and less salient national income gaps reported the highest protectionist demand. Low-salient information about growing income disparities in the US as well as abroad seem to produce less support for protectionist measures. Yet it is still comparatively higher than the average protectionist sentiment expressed among respondents in the control group. In the following, I further probe whether these differences in the opposition to international trade are indeed accounted for by the information treatments. In addition, I examine which type of inequality plays a stronger role in shaping individuals' trade attitudes.

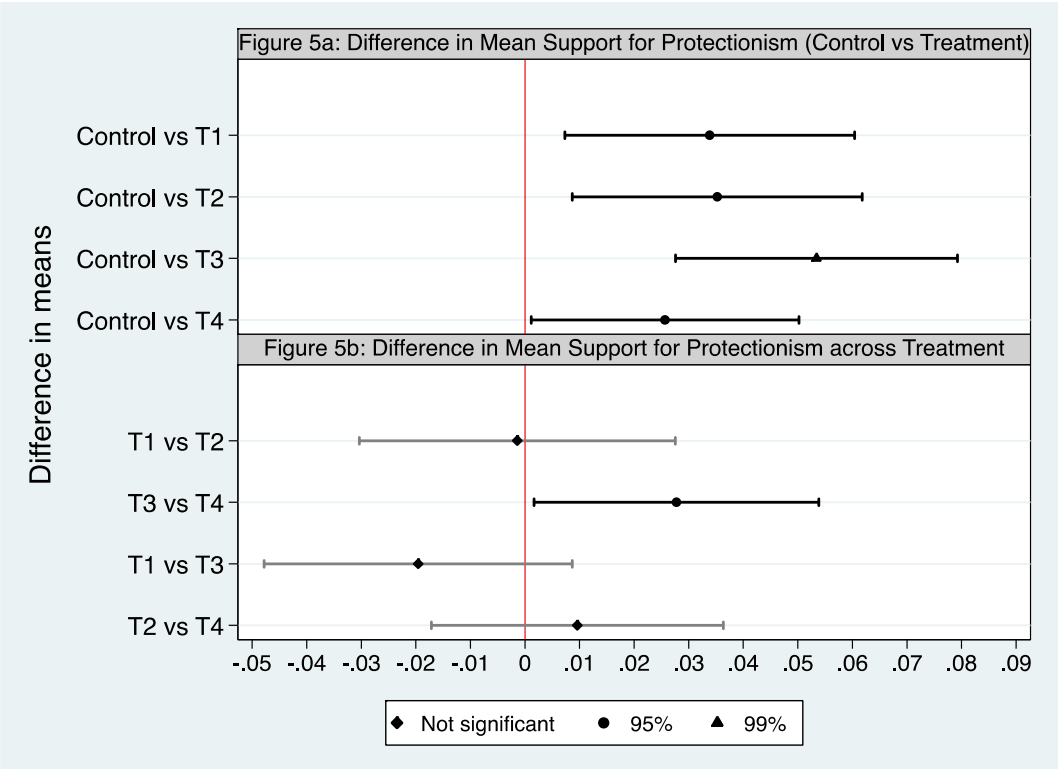
**Figure 4**: Average Level of Support for Protectionism Across Control and Treatment Groups




Note: The reference line represents the sample mean of support for protectionism (=0.375).

I first conduct Student's t-test to compare the mean level of support for protectionism between the control group and each experimental treatment group. Overall, the results in Figure 5a lend support to the paper's hypothesis that concern for general income inequality between segments in society decreases support for international trade. Independent of the type of inequality highlighted in the information treatment respondents who received information about rising income inequality show a stronger preference for protectionist trade policy. The difference between exposure to growing income gaps information and obtaining no information is statistically significant across all treatment groups. The difference is largest between respondents in the control group and respondents who learned about rising income inequality in a developing region in an interactive manner and read about rising national income inequality. I find the smallest difference in means of protectionist demand between the control group and treatment group 4 in which respondents simply read about growing income gaps both in the US and in a developing region.

**Figure 5**: Difference in Means of Support for Protectionism




*Note*: 1) Dots indicate the difference in mean support for protectionism between control group and each experimental treatment group (Figure 5a), and across experimental treatment groups (Figure 5b). 2) Whiskers indicate the 95% confidence intervals around the means.

Next, I compare the average support for protectionism across the experimental treatment groups in order to examine the relative importance of the inequality type in influencing individuals' trade policy opinion. First, I contrast treatment 1 and treatment 2. In both treatment groups, respondents received high-salience information about rising income inequality at home, while the salience of the information about rising income inequality in a developing region differs (Treatment 1: high salience, Treatment 2: low salience). Thus, comparing the mean level of protectionist demand between these two treatment groups allows me to capture the importance of the global inequality treatment prime. Similarly, difference in mean protectionist support between treatment 3 and 4 reflects the influence of information of global rising income disparities in shaping individual trade preference. As shown in Figure 5b, the high-salience information about widening income gaps outside the US, in a developing region[20] presented in treatment 3 generates stronger protectionist support than low-salience information about global inequality.

[20] In addition to randomly assigning respondents to either high-salience information about rising income inequality in South Asia or Sub-Saharan Africa, I also run a statistical test for potential contingent effect of the treatment region on respondents' level of protectionist support. Results from the regression analysis show that the specified developing region did not have any statistically significant effect on respondents' attitude toward trade.

To assess the impact of the domestic inequality prime, I contrast treatment 1 with treatment 3. While respondents were exposed to high-salience information about rising income inequality in a (randomly assigned) developing region in both treatment groups, salience of news about domestic inequality varies between the two experimental conditions. In a similar vein, variation of salience in the presentation of domestic income disparities combined with low-salience information about global income gaps in both treatment conditions 2 and 4 makes it possible to analyze the impact of the domestic inequality prime. However, the findings in Figure 5b indicate that varying the salience of information about rising income inequality at the national level does not significantly increase people's support for trade protectionism.

To evaluate the robustness of the observed treatment effects I formally test the effect of the exposure to the inequality information treatments on respondents' attitude toward international trade, while controlling for important demographic characteristics. Table 4 shows that treatment membership increased respondents' support for protectionism. In other words, respondents who received information about rising income inequality reported more favorable attitudes toward limiting international trade as compared to respondents from the control group who did not receive further information. Column 1 presents the sole effect of each experimental condition on stated support for protectionism. As predicted, all coefficient signs are positive indicating an increase in protectionist sentiment among respondents who have been exposed to information about income disparities. With the exception of treatment condition 4, all coefficients are statistically significant.

**Table 4**: Predictor Variables of Support for Protectionism

| VARIABLES | (1) | (2) |
|---|---|---|
| Treatment 1: NatHi-GlobeHi | 0.0338** | 0.0399** |
| | (0.0163) | (0.0161) |
| Treatment 2: NatHi-GlobeLow | 0.0352** | 0.0374** |
| | (0.0163) | (0.0161) |
| Treatment 3: NatLow-GlobeHi | 0.0534*** | 0.0474*** |
| | (0.0156) | (0.0154) |
| Treatment 4: NatLow-GlobeLow | 0.0257 | 0.0245 |
| | (0.0156) | (0.0154) |
| Age | | 0.0009* |
| | | (0.0005) |
| Female | | 0.0013 |
| | | (0.0107) |
| Ideology (Republican) | | -0.0148 |
| | | (0.0146) |
| Ideology (Independent) | | 0.0045 |

| | | |
|---|---|---|
| | | (0.0118) |
| Ideology (Other) | | -0.0309 |
| | | (0.0283) |
| Education | | -0.0073** |
| | | (0.003) |
| Economic Education | | -0.0085 |
| | | (0.0059) |
| Job Status (Self-employed) | | 0.0059 |
| | | (0.0162) |
| Job Status (Employed) | | 0.0126 |
| | | (0.012) |
| Income | | -0.001 |
| | | (0.0013) |
| Evaluation of National Economic Condition | | 0.229*** |
| | | (0.029) |
| Nationalism | | 0.0037 |
| | | (0.0047) |
| Collectivism | | -0.0004 |
| | | (0.0052) |
| Risk | | 0.0093*** |
| | | (0.0024) |
| Constant | 0.346*** | 0.233*** |
| | (0.0109) | (0.0454) |
| Observations | 1,506 | 1,439 |
| R-squared | 0.008 | 0.094 |

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

As shown in Column 2, the treatment effects maintain statistical significance even after including the set of control variables described above. Among the control variables, I find that *Age* has a statistically significant effect with older people reporting more sympathy toward limiting international trade. Consistent with previous findings, *Education* is associated with individuals' trade opinions. More specifically, higher educational attainment decreases positive attitudes toward protectionism. The results indicate that *Education in Economics* has a similar effect like general education. However, the measure does not approach statistical significance.

I also find that respondents' evaluation of the country's economic performance as captured by the index *Economic Condition* has a statistically significant effect on people's trade preferences. Respondents who are pessimistic about the country's economic performance are more likely to prefer limiting international trade. This finding lends support to the sociotropic argument, which posits that individuals evaluate international trade based on considerations about trade's impact on the country as a whole. More importantly, the inclusion of respondents' evaluation of the country's economic performance does not render

the effect of the information treatments redundant. This finding suggests that next to concerns about other macroeconomic conditions such as unemployment, concerns about the overall distribution of income can indeed also have considerable effect on people's evaluation of international trade.

Finally, the results indicate that non-economic factors, including respondents' nationalistic feelings and risk orientation can play a considerable role in shaping individuals' trade opinions. In line with findings from earlier studies, respondents who welcome a more assertive role of the US in defending its national interest are more likely to support protectionism. Individuals who feel less comfortable taking risks are show less favorable attitudes toward trade liberalization.

Overall, these findings show that the treatment conditions were effective in influencing respondents' trade attitudes as theorized. In particular, across all treatment groups, exposure to information about rising income inequality significantly increased people's support for limiting international trade as compared to respondents in the control group who did not receive any information on income distribution trends. Furthermore, assessing the relative importance of the type of inequality in influencing people's trade preferences, I find that information about rising income disparities abroad serve as an effective prime in increasing public demand for protectionism as compared to information about national inequality. This finding lends strong support to the study's hypothesis that support for trade restrictions are not merely a reflection of employment-related interests but reflect individuals' sincere concerns about potential negative effects of international trade on others. The claim by free trade supporters that demands for limiting international trade motivated by inequality concerns is primarily a case of protectionism in disguise does not uphold in light of these findings.

## Conclusion

One common view about popular attitudes toward social and economic differences among the US public is that economic inequality is considered to be natural and unobjectionable. As Glazer puts it, "Americans, unlike the citizens of other prosperous democracies, not to mention those of poor countries, do not seem to care much about inequality." (2003: 111). The results from the present study challenge this alleged indifference toward income inequality among the wider US public. First, rising income inequality has not gone unnoticed by the public. Data from the American National Election Studies show that there is growing

concern over the way economic benefits are shared in the society. Individuals who are concerned about rising inequality readily associate international trade with widening economic differences within and between societies. Thus, if trade is seen as widening income inequality, individuals may not support open trade even when they are aware of the positive effects of economic openness. Rising income disparities can, therefore, have considerable impact on individual trade preference formation.

Empirically, I employ a dual strategy to analyze the impact of inequality concerns on individual trade preferences. Using existing survey data from the American National Election Studies I identify a positive association between people's concern about rising income inequality and protectionist attitude toward trade. In a second step, I carry out a survey experiment to identify the causal effect of inequality concerns on individual trade preference formation. The results from the survey experiment suggest that priming respondents to be more concerned about inequality by providing information about rising income inequality (without any reference to trade liberalization) generally decreases public support for economic globalization. Moreover, the findings suggest that such opposition to open markets are motivated by sincere fairness considerations rather than echoing employment-related motives to safeguard domestic jobs. More specifically, I find that information about rising income inequality abroad seem to encourage greater protectionist demand among respondents. These results also lend support to the general argument advanced in the emerging literature on fair trade preferences (e.g., Ehrlich 2010), which argues that people have sincere concerns about trade's negative externalities on certain segments of the society or the environment and may favor trade restrictions due to such concerns.

However, it needs to be kept in mind that the findings are based on opinions stated by the wider US public. Generalizations are thus limited to societies with similar socio-economic characteristics. Extending the analysis to include additional countries can provide important insights into potential conditional effects of the relationship between individuals' inequality perceptions and attitudes toward trade. For example, the literature on the trade-environment linkage posits that, in developed, advanced industrialized countries, people's environmental concerns can generate considerable opposition toward free trade (Bechtel et al. 2012). More generally, in a cross-country comparison of public concern about the state of the environment, Franzen and Meyer (2010) find that cross-national differences in environmental attitudes, including the willingness to forego economic growth for environmental quality is conditional on a certain level of economic prosperity in a given society. A cross-country analysis could provide answers as to whether concern for inequality is a "higher-order" value people adopt

as they enjoy economic wealth. Does the inequality-trade linkage only kick in when people have fulfilled their basic needs, and start prioritising relative incomes rather than being solely worried their absolute share of the pie? Alternatively, prevailing inequality norms in the given society may influence the relationship between people's concern about income distribution and their trade opinion. Given the single-country focus of the present study, addressing these questions is beyond the scope of this paper.

In addition, while the survey experiment design generates results with high internal validity, one has to be careful in generalizing these findings based on responses of AMT registered users to the wider US public. As noted above, the most problematic aspect is probably the self-selection of the participants into the survey as compared to a sample that is randomly drawn from the population. Therefore, in order to make more general arguments about the impact of income inequality concerns on individual trade preferences among the wider US public, it would be ideal to administer this survey experiment with a randomly drawn sample from the population. However, since the results from the current survey experiment are consistent with the findings from the ANES survey data I am confident that these findings are not a mere artefact resulting from particular demographic characteristics of the AMT sample.

In sum, Americans are becoming more aware of widening economic differences in their society, and they increasingly seem to mind the gap. Trade policy implications are known to provoke strong and often polar opinions, since they directly affect job security and income levels – issues that are dear to the hearts of all citizens. Past political experience has shown that the issue of income inequality can fuel fierce political conflict within societies. In addition, as a relatively new "social problem" in American public perception, attitudes toward inequality are likely to be weakly developed and sensitive to contemporaneous debates, including those promoted by the anti-globalization movement. Such concerns may translate into protectionist sentiment and foster the global backlash against economic globalization. Policymakers committed to fostering trade liberalization and the multilateral trading system may need to get a better sense of the country-specific level of equality-growth trade-offs. This can help them to address questions over the distribution of the benefits of economic integration when designing and implementing trade policies aimed at improving people's wellbeing and thereby gaining more public support.

## References


Acemoglu, Daron and James Robinson. 2005. *Economic Origins of Dictatorship and Democracy: Economic and Political Origins*. Cambridge University Press: New York.

APSA Task Force. 2004. "American democracy in an age of rising inequality." Perspectives on Politics 2 (4): 651-666.

Atkinson, Anthony B., Thomas Piketty, and Emmanuel Saez. 2011. "Top Incomes in the Long Run of History." Journal of Economic Literature, 49 (1): 3-71.

Baron, Jonathan, Max Bazerman, and Katherine Shonk. 2006. "Enlarging the societal pie through wise legislation. A psychological perspective." Perspectives on Psychological Science, 1 (2): 123-132.

Baron, Jonathan, and Simon Kemp. 2004. "Support for trade restrictions, attitudes, and understanding of comparative advantage." Journal of Economic Psychology 25: 565-580.

Baron, Jonathan. 1996. "Do no harm." In: David M. Messick, and Ann E. Tenbrunsel (eds.). *Codes of conduct: Behavioral research into business ethics.* Russell Sage Foundation : New York. 197-213.

Baron, Jonathan. 1995. "Blind justice: Fairness to groups and the do-no-harm principle." Journal of Behavioural Decision Making 8: 71-83.

Bartels, Larry M. 2005. "Homer gets a tax cut: Inequality and public policy in the American mind." Perspectives on Politics 3 (1): 15-31.

Bazerman, Max, Jared R. Curhan, Don A. Moore, and Kathleen L. Valley. 2000. "Negotiations." Annual Review of Psychology 51: 279-314.

BBC World Service. 2008. "Widespread Unease about Economy and Globalization – Global Poll." British Broadcasting Company, London.

Bechtel, Michael M., Thomas Bernauer, and Reto Meyer. 2012. "The Green Side of Protectionism: Environmental Concerns and Three Facets of Trade Policy Preferences." Review of International Political Economy 19 (5): 837-866.

Berinsky, Adam, Gregory Huber, and Gabriel Lenz. 2012. "Evaluating Online Labor Markets for Experimental Research: Amazon.com's Mechanical Turk." *Political Analysis* 20(3): 351-368.

Bhagwati, Jagdish, and T.N. Srinivasan. 1996. "Trade and the Environment: Does Environmental Diversity Detract from the Case for Free Trade? In: Jagdish Bhagwati, and Robert E. Hudec (eds.). *Fair Trade and Harmonization: Prerequisites for Free Trade?* MIT Press: Cambridge. 159-223.

Bhagwati, Jagdish. 1995. "Trade Liberalization and "Fair Trade" Demands: Addressing the Environmental and Labor Standards Issues." World Economy 18 (6): 745-759.

Bowie, Norman E. 1971. Towards a new theory of distributive justice. University of Massachusetts Press: Amherst.

Brown, Drusilla K., Alan V. Deardorff, and Robert M. Stern. 1996. “International Labor Standards and Trade: A Theoretical Analysis. In: Jagdish Bhagwati, and Robert E. Hudec (eds.). *Fair Trade and Harmonization: Prerequisites for Free Trade?* MIT Press: Cambridge. 227-280.

Camerer, Colin F. 2003. *Behavioral Game Theory, Experiments in Strategic Interaction*. Princeton University Press: Princeton.

Caplan, Bryan. D. 2007. *The myth of the rational voter*. Princeton University Press: Princeton.

Caplan, Bryan. 2002. “Systematically biased beliefs about economics: Robust evidence of judgmental anomalies from the survey of Americans and economists on the economy.” Economic Journal 112 (479): 433-458.

Charness, Gary, and Matthew Rabin. 2002. “Understanding Social Preferences with Simple Tests.” The Quarterly Journal of Economics 117 (3): 817-879.

Demombynes, Gabriel, and Ozler Berk,. 2005. “Crime and local inequality in South Africa.” Journal of Development Economics 76: 265-292.

Dollar, David. 2004. “Globalization, Poverty and Inequality since 1980.” World Bank Research Observer 20 (2): 145-176.

Ehrlich, Sean D. 2010. “The Fair Trade Challenge to Embedded Liberalism.” International Studies Quarterly 54: 1013-1033.

Ehrlich, Sean D., and Cherie Maestas. 2010. “Risk Orientation, Risk Exposure, and Policy Opinions: The Case of Free Trade.” Political Psychology 31 (5): 657-684.

Fehr, Ernst, and Klaus Schmidt. 1999. “A Theory of Fairness, Competition, and Cooperation.” Quarterly Journal of Economics 114 (3): 817-868.

Franzen, Axel, and Reto Meyer. 2010. “Cross-National Perspective: A Multilevel Analysis of the ISSP 1993 and 2000.” European Sociological Review 26 (2): 219-234.

Fordham, Benjamin O., and Katja B. Kleinberg. 2012. “How Can Economic Interests Influence Support for Free Trade?” International Organization 66 (2): 311-328.

Glazer, Nathan. 2003. “On Americans and Inequality.” Daedalus 132 (3): 11-115.

Goldberg, Pinelopi K., and Nina Pavcnik. 2007. “Distributional Effects of Globalization in Developing Countries.” Journal of Economic Literature XLV: 39-82.

Güth, Werner, Schmittberger, Rolf, and Bernd Schwarze. 1982. “Experimental Analysis of Ultimatium Bargaining.” Journal of Economic Behavior and Organization III: 367-388.

Haferkamp, Alexandra, Detlef Fetchenhauer, Frank Belschak, and Dominik Enste. 2009. “Efficiency versus Fairness. The evaluation of labor market policies by economists and laypeople.” Journal of Economic Psychology 30: 527-539.

Hausman, Daniel M. and Michael S. McPherson. 2006. *Economic analysis, moral philosophy, and public policy.* Cambridge University Press: Cambridge.

Hiscox, Michael J. 2006. “Through a Glass and Darkly: Attitudes Toward International Trade and the Curious Effects of Issue Framing.” International Organization 60 (3): 755-780.

Hwang, Jinyoung, and Kun-Oh Jung. 2002. “Initial asset inequality and tariff formation: a cross-country analysis.” Economic Letters: 405-410.

Kahneman, Daniel and Amos Tversky. 1984. “Choices, Values and Frames.” American Psychologist 39 (4): 341-350.

Kelly, Morgan. 2000. “Inequality and Crime.” The Review of Economics and Statistics 82 (4): 530-539.

Kemp, Simon. 2007. “Psychology and opposition to free trade.” World Trade Review 6 (1): 25-44.

Kinder, Donald R., and Roderick D. Kiewiet. 1981. “Sociotropic Politics: The American Case.” British Journal of Political Science 11 (2): 129-161.

Kroll, Yoram, and Liema Davidovitz. 2003. “Inequality Aversion versus Risk Aversion.” Economica 70: 19-29.

Kuziemko, Ilyana, Michael I. Norton, Emmanuel Saez, and Stefanie Stantcheva. 2013. “How elastic are preferences for redistribution? Evidence from randomized survey experiments.” NBER Working Paper 18865. National Bureau of Economic Research: Cambridge.

Levitt, Steven D., and John A. List. 2007. “ What do Laboratory Experiments Measuring Social Preferences Reveal About the Real World?” Journal of Economic Perspectives 21 (2): 153-174.

Lü, Xiabo, Kenneth Scheve, and Matthew J. Slaughter. 2012. “Inequity Aversion and the International Distribution of Trade Protection.” American Journal of Political Science 56 (3): 638-654.

Mansfield, Edward. D., and Diana C. Mutz. 2009. “Support for Free Trade: Self-Interest, Sociotropic Politics, and Out-Group Anxiety.” International Organization 63 (3): 425-457.

Marktanner, Marcus, and Nagham Sayour. 2009. “Does Initial Inequality Prevent Trade Development? A Political-Economy Approach.” Trade and Development Review 2 (2): 93-105.

Mayda, Anna M., and Dani Rodrik. 2005. “Why are some people (and countries) more protectionist than others?” European Economic Review 49 (6): 1393-1430.

McCall Leslie, and Lane Kenworthy. 2009. “American’s Social Policy Preferences in the Era of Rising Inequality.” Perspectives on Politics 7 (3): 459-484.

Milanovic, Branko. 2005. “Can We Discern the Effect of Globalization on Income Distribution? Evidence from Household Surveys.” The World Bank Economic Review 19 (1): 21-44.

Muller, Edward N. 1985. “Income Inequality, Regime Repressiveness, and Political Violence.” American Sociological Review 50: 47-61.

Okun, Arthur M. 1975. “Equality and Efficiency: The Big Trade-Off.” Brookings Institution, Washington.

O’Rourke, Kevin, and Richard Sinnott. 2001. “The Determinants of Individual Trade Policy Preferences: International Survey Evidence.” Trinity Economics Paper 200110. Department of Economics, Trinity College Dublin.

Pew Research Center. 2013. “Economies of Emerging Markets Better Rated During Difficult Times.” Global Attitudes Project. Pew Research Center, Washington.

Pew Research Center. 2014. “Faith and Skepticism about Trade, Foreign Investment.” Global Attitudes Project. Pew Research Center, Washington.

Pogge, Thomas W. 2007. “Why Inequality Matters.” In: David Held, and Ayse Kaya (eds.). *Global Inequality: Patterns and Explanations*. Polity Press: Cambridge. 105-132.

Przeworski, Adam. 1992. “The Games of Transition.” In: Scott Mainwaring, Guillermo O’Donnell, and Samuel Valenzuela (eds.). *Issues in Democratic Consolidation*. University of Notre Dame Press: Notre Dame, Indiana. 105-153.

Ross, Joel, Andrew Zaldivar, Lilly Irani, and Bill Tomlinson. 2010. “Who are the Crowdworkers?: Shifting Demographics in Amazon Mechanical Turk.” In: *CHI EA 2010*. 2863-2872.

Royzman, Edward B., and Jonathan Baron. 2002. “The preference for indirect harm. Social Justice Research.” Social Justice Research 15 (2): 165-184.

Schaffer, Lena, and Gabriele Spilker. 2013. “Ego- vs. Sociotropic: Using Survey Experiments to Understand Individuals’ Trade Preferences.” NNCR Trade Working Paper No. 2013/08. World Trade Institute, Berne.

Scheve, Kenneth F., and Matthew J. Slaughter. 2006. “Public opinion, international economic integration, and the welfare state.” In: Pranab Bardhan, Samuel Bowles, and Michael Wallerstein (eds.). *Globalization and egalitarian redistribution*, Princeton University Press: Princeton. 499-521.

Singer, Matthew M., Guillermo Rosas. 2007. “Perceptions of Economic Inequality and Presidential Approval: Evidence from Argentina.” Working Paper Series No.5. Center for Latin American Studies. University of Miami, Miami.

Sobel, Joel. 2005. “Interdependent Preferences and Reciprocity.” Journal of Economic Literature 43 (2): 392-436.

Wade, Robert H. 2007. “Should We Worry About Income Inequality?” In: David Held and Ayse Kaya (eds.). *Global Inequality: Patterns and Explanations*. Polity Press: Cambridge. 74-104.

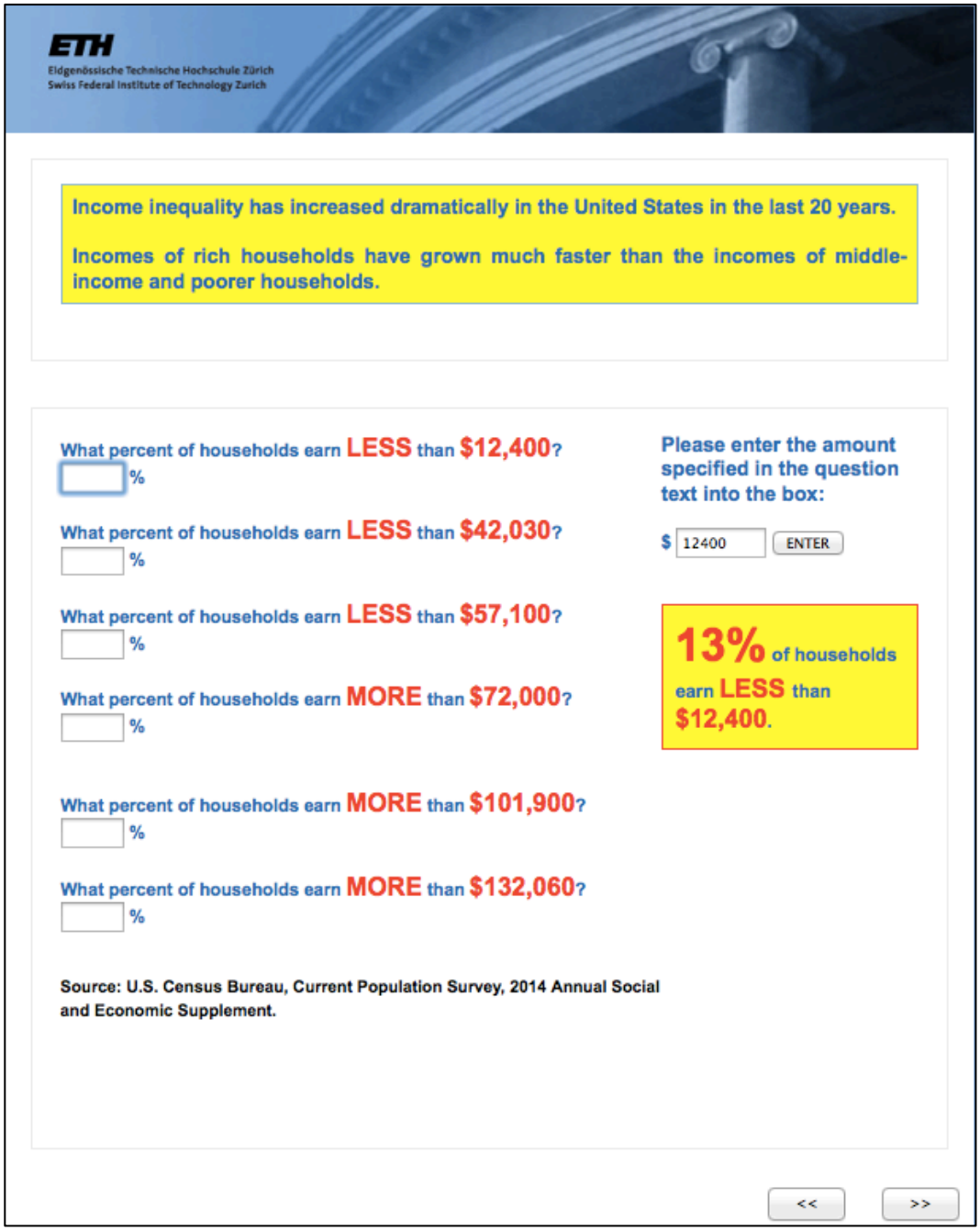
World Trade Organization (WTO). 2013. World Trade Report. World Trade Organization, Geneva.

# Appendix

**Table A1**: List of Variables from the American National Election Studies, 2004-2012

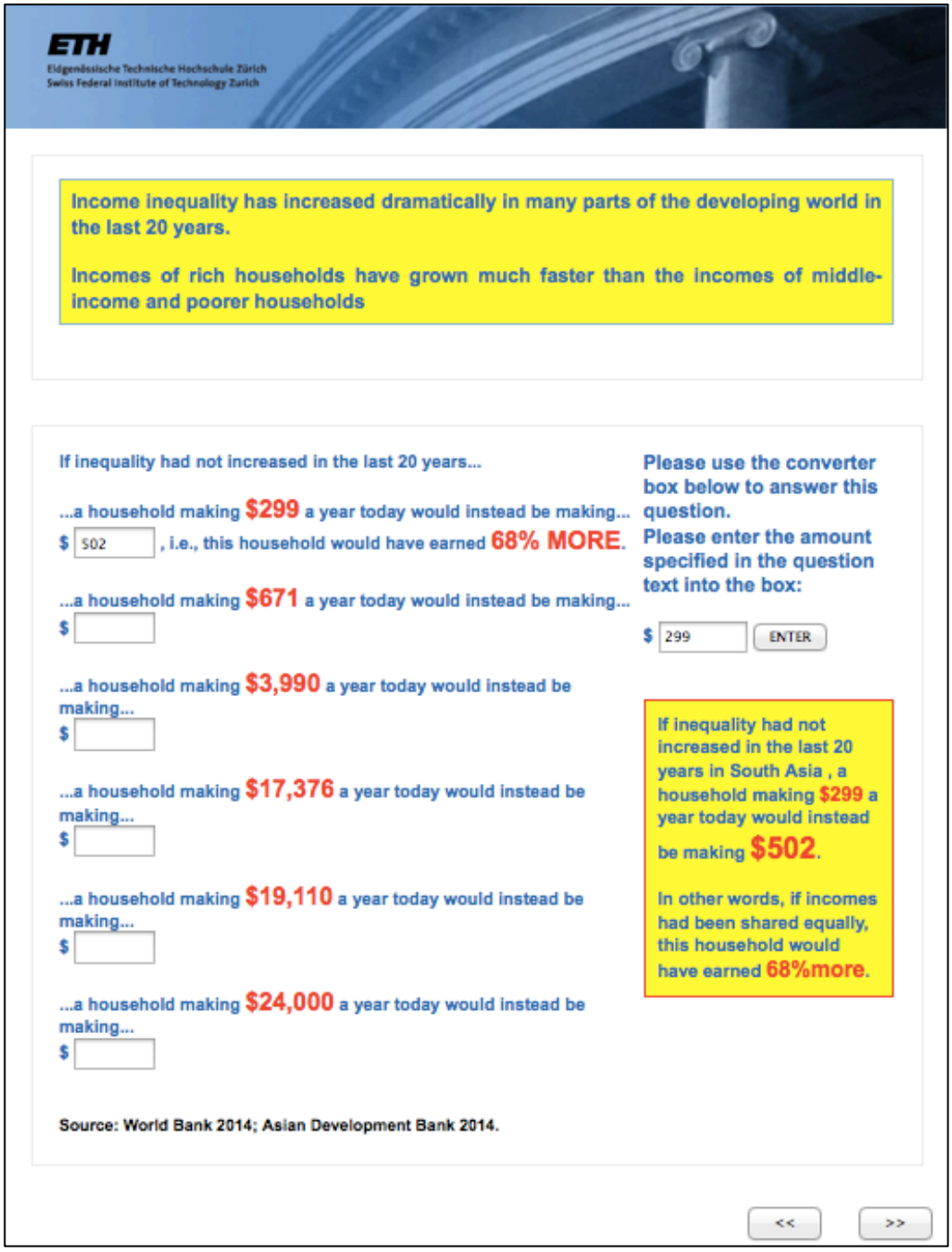
| | |
|---|---|
| **1. Outcome Variable** | |
| *Protectionism* | "Some people have suggested placing new limits on foreign imports in order to protect American jobs. Others say that such limits would raise consumer prices and hurt American exports. Do you favor or oppose placing new limits on imports, or haven't you thought much about this?"<br>[0=Oppose; 1=Favor] |
| **2. Predictor Variable** | |
| *Inequality* | "Do you think the difference in incomes between rich people and poor people in the United States today is larger, smaller, or about the same as it was 20 years ago?"<br>[1=Much smaller; 2=Somewhat smaller; 3=About the same; 4=Somewhat larger; 5=Much larger] |
| **3. Control Variables** | |
| *Age* | "What is the month, day and year of your birth?" |
| *Gender* | [0=Male; 1=Female] |
| *Education* | "What is the highest grade of school or year of college you have completed?"<br>[1=8 grades or less; 2=9-12 grades ("high school"), no diploma; 3=12 grades, diploma or equivalency; 4=Some college, no degree; 5=BA level degrees; 6=Advanced degrees incl. LLB] |
| *Family income* | "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*)<br>[1=0 to 16$^{th}$ percentile; 2=17 to 33$^{rd}$ percentile; 3=34 to 67$^{th}$ percentile; 4=68 to 95$^{th}$ percentile; 5=96 to 100$^{th}$ percentile] |
| *Employment status* | "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?"<br>[0=Not working (includes: temporarily laid off, unemployed, retired, permanently disabled, homemaker, student); 1=Working] |
| *Political ideology* | "Would you consider yourself a LIBERAL or a CONSERVATIVE?"<br>[0=Moderate; 1=Liberal; 2=Conservative] |
| *Evaluation of country's economy (past 12 months)* | "Now thinking about the economy in the country 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?"<br>[0=Stayed about the same, 1=Gotten better, 2=Gotten worse] |
| *Evaluation of country's economy (next 12 months)* | "What about the next 12 months? Do you expect the economy, in the country as a whole, to get BETTER, stay ABOUT THE SAME, or get WORSE?"<br>[0=Stay about the same, 1=Get better, 2=Get worse] |

**Figure A1**: Screenshot of High-salience Information about Domestic Income Inequality




*Note*: In a previous page, respondents were asked to study an example before being directed to the actual treatment condition page.

**Figure A2**: Screenshot of High-salience Information about Global Income Inequality




*Note*: In a previous page, respondents were asked to study an example before being directed to the actual treatment condition page.

**Figure A3**: Screenshot of Low-salience Information about Domestic and Global Income Inequality

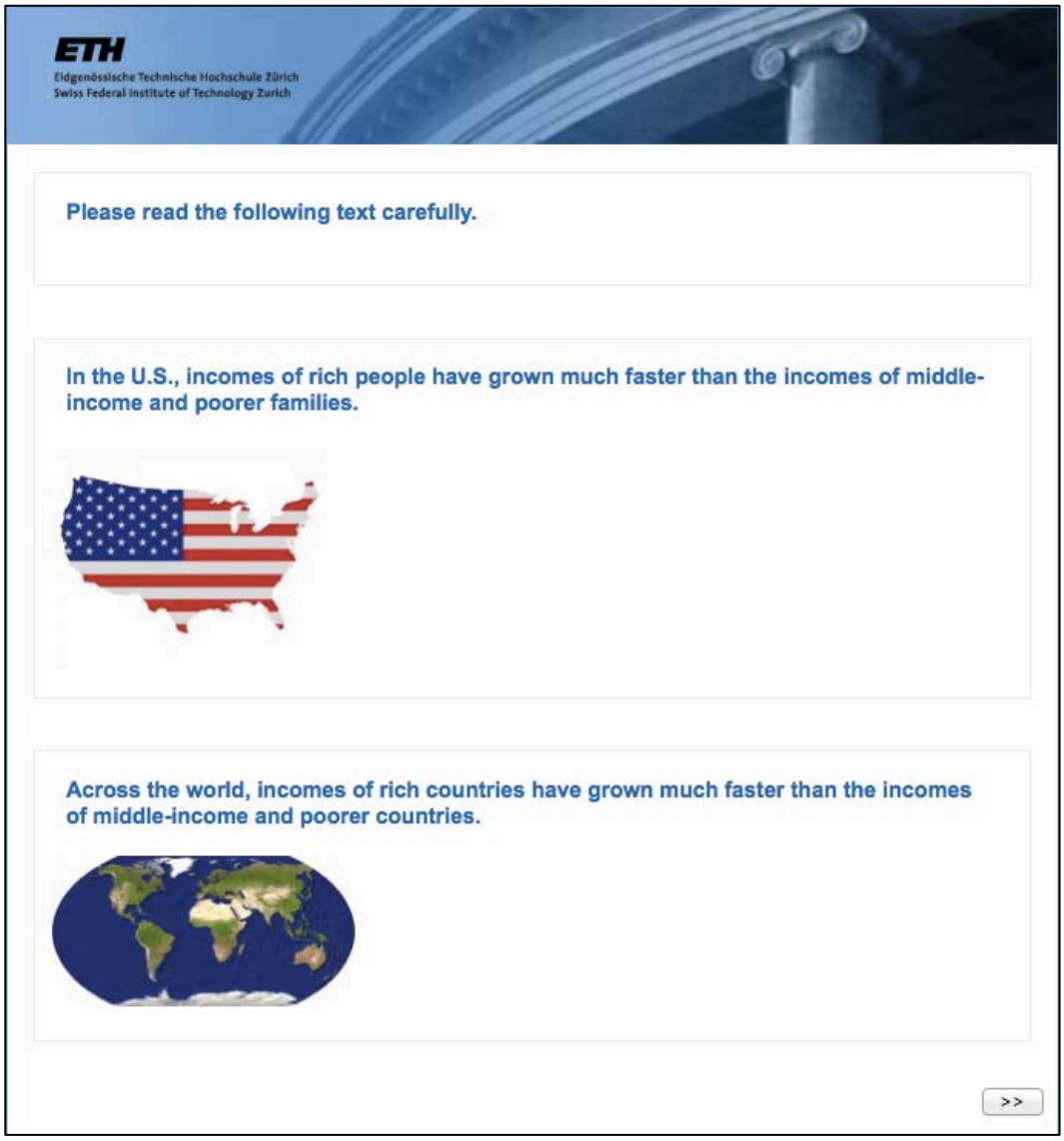



**Table A2**: Comparison of Summary Statistics between ACS and AMT Sample

| | ACS sample* (in percent) | AMT sample (in percent) |
|---|---|---|
| Gender | | |
| Male | 49.2 | 53 |
| Female | 50.8 | 47 |
| Median Age | 37.5 | 29 |
| Education | | |
| High school graduates or higher | 86.6 | 42.56 |
| Bachelor's degree or higher | 29.6 | 51.02 |
| Employment | | |
| Employed | 63.6 | 68.27 |
| Unemployed | 36.4 | 31.73 |
| Median household income | $52,250 | $45,000-$49,999 |

* *Source*: U.S. Census Bureau, 2013 American Community Survey.

**Table A3**: List of Variables from Survey Experiment

| | |
|---|---|
| **1. Outcome Variable** | |
| *Protectionism* | Standardized index of protectionist sentiment from 10 survey items (see Table 3). |
| **2. Predictor Variable** | |
| *Inequality* | Standardized index (0 to 1) from the following 5 items:<br>1. "Do you think that income inequality is a serious problem in the United States these days?" [1=Not a problem at all; 2=A small problem; 3=A problem; 4=A serious problem; 5=A very serious problem]<br>2. "Large differences in income are necessary for prosperity." [1=Strongly agree; 2=Partly agree; 3=Neither agree nor disagree; 4=Partly disagree; 5=Strongly disagree]<br>3. "Differences in income in the United States are too large." [1=Strongly disagree; 2=Partly disagree; 3=Neither agree nor disagree; 4=Partly agree; 5=Strongly agree]<br>4. "Differences in income between rich and poor countries across the world are too large." [1=Strongly disagree; 2=Partly disagree; 3=Neither agree nor disagree; 4=Partly agree; 5= Strongly agree]<br>5. 1=We need large income differences as incentives for individual effort; 6=Income should be made more equal |
| **3. Control Variables** | |
| *Age* | "In what year were you born?" |
| *Gender* | "Are you male or female?"<br>[0=Male; 1=Female] |
| *Political ideology* | "Generally speaking, do you think of yourself as a …?"<br>[1=Democrat; 2=Republican, 3=Independent; 4=Other] |
| *Education* | "What is the highest level of education you have attained?"<br>[1=No formal education; 2=Income primary school; 3=Complete primary school; 4=Incomplete secondary school: technical/vocational type; 5=Complete secondary school: technical/vocational type; 6=Incomplete secondary school: university-preparatory type, 7=Complete secondary school: university-preparatory type; 8=Some university-level education, without degree; 9=University-level education, with degree] |
| *Education in economics* | "Have you received any education in economics?"<br>[1=Never taken any economics courses so far; 2=Economics courses part of studies at high school; 3=Economics courses part of studies at college/university; 4=Study/studied economics as a major subject] |
| *Employment status* | "What is your current occupation?" (*collapsed*)<br>[0=Non-active; 1=Self-employed; 2=Employed] |
| *Family income* | "We would like to ask you about your household income in the past 12 months, counting all wages, salaries, pensions and other incomes before taxes and other deductions. Was your household income …?"<br>[1=Less than $20,000; 7=$45,000 to $49,999; 10=More than $75,000] |
| *Evaluation of country's* | Standardized index (0 to 1) from the following 5 items: |

| | |
|---|---|
| *overall economic* | 1. "What do you think about the state of the economy these days in the United States?" [1=Very good, 2=Good, 3=Neither good nor bad; 4=Bad; 5=Very bad]<br>2. "Would you say that over the past 12 months the nation's economy has gotten better, stayed about the same, or gotten worse?" [1=Got much better; 2=Got somewhat better; 3=Stayed about the same; 4=Got somewhat worse; 5=Got much worse]<br>3. "What about the next 12 months? Do you expect the economy to get better, stay about the same, or get worse?" [1=Get much better; 2=Get somewhat better; 3=Stay about the same; 4=Get somewhat worse; 5=Get much worse] |
| *Nationalism* | "The United States should follow its own interests, even if this leads to conflicts with other countries."<br>[1=Strongly disagree; 2=Partly disagree; 3=Neither agree nor disagree; 4=Partly agree; 5=Strongly agree] |
| *Collectivism* | "For the sake of the national community/society, the individual should put his/her personal interests second."<br>[1=Strongly disagree; 2=Partly disagree; 3=Neither agree nor disagree; 4=Partly agree; 5=Strongly agree] |
| *Risk orientation* | "People often have to take risks when making financial, career, or other life decisions. How comfortable or uncomfortable do you feel when taking such risks?"<br>[1=Extremely comfortable taking risks; 10=Extremely uncomfortable taking risks] |