Fair Play?: Equity and Equality in American Attitudes towards Trade

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ABSTRACT: American politicians repeatedly and strenuously invoke concerns about fairness when pitching their trade policies to their constituents, unsurprisingly since fairness is one of the most fundamental and universal moral concepts. Yet existing international relations scholarship tends to neglect fairness, considering it only in the context of trade's deleterious effect on vulnerable populations. Drawing on findings in social psychology and behavioral economics, we develop and find evidence for a "myopic fairness" argument. In a national survey of Americans, we find strong evidence that fairness, conceived both in terms of equality and equity, is crucial for understanding support for potential trade deals and support for renegotiating existing ones. Americans view as most fair and most preferable outcomes in which concessions and benefits are equal, especially when those equal benefits match productivity. Fairness judgments are not merely self-serving, endogenous to relative or absolute gains. However, we find that Americans have an egoistically biased sense of fairness, responding particularly negatively to any outcome that leaves the United States relatively worse off, a sense of injustice that does not extend to relative gains for Americans.

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When American Presidents talk about free trade, they are likely to mention the importance of fairness. They insist that other countries provide the same market access to American goods as the United States provides to the goods of their exporters. Presidents repeatedly insist on equivalent concessions by others before the United States lowers its own trade barriers, and they complain that the tariff rates of other countries are higher. But why? If economics is the way by which individuals increase their material well-being and foreign economic policy is the way by which governments increase the prosperity of their citizenry, then the standard for a good or bad trade deal should be whether any trade policy benefits national welfare. Yet politicians repeatedly invoke concerns about fairness when negotiating trade agreements, which is an inherently relational concept. By a fairness standard, an American leader might reject (or an American citizen might oppose) a trade deal in which a foreign nation reduces its tariff barriers by 10% and the United States by 20% but yet accept and support a trade deal in which both reduce their barriers by 5%. However, this makes little sense from a nationally-egoistic point of view. So why do politicians focus on fairness when negotiating and discussing trade agreements?

The answer is likely political, imposed by domestic audiences. Zacher writes, "Most observers argue that reciprocity is a requirement imposed on trade negotiators by fundamentally political imperatives. Governments feel compelled to justify their tariff 'concessions' to instinctively mercantilistic domestic audiences by pointing out that major trading partners have made at least equivalent 'sacrifices.'"(575). We agree. However, it remains an open question why the mass public would care about relative fairness of agreements, and whether, and how, the mass public actually thinks about fairness of trade agreements?

Following in the behavioral economics tradition, we argue that fairness is a powerful moral principle, a universal moral norm that can rarely be extricated from questions of cooperation and distribution of resources. It is well established, for instance, that individuals will forgo economic gains if they feel that the distribution is unequal, a conclusion consistently brought home by the findings of ultimatum games in economic experiments (Oosterbeek, Sloof and Van De Kuilen, 2004). We hypothesize that the effect of fairness will be powerful in questions of international political economy was well.

Despite the ubiquity of fairness concerns in all social and political questions, international relations scholars are only beginning to take fairness as a motivating force in international politics seriously (Gottfried and Trager, 2016). To the extent that the effect of fairness on trade policy has

been considered, studies have primarily focused on "fair trade" concerning labor, environmental, and human rights conditions of trade partners (Ehrlich, 2010, 2018). While these considerations are an important factor that influences a sizeable minority of the public's views toward trade (Ehrlich, 2018, 17), this is not generally what American officials have in mind when they discuss fair trade, as we show below. If perceptions of fairness are a core domestic constraint on, or motivation behind, the trade policy of countries, it is critical that we gain a better understanding of what fairness means in the context of international relations and trade and whether and how it matters.

There is also now considerable evidence that Americans make judgments about trade based on sociotropic considerations (Guisinger, 2017; Mansfield and Mutz, 2009). They assess how trade affects the United States as a whole, not just on how they might fare individually. We take these studies as our starting point. However, they are bedeviled by the same question. If Americans are interested primarily (or least largely) in how trade deals affect the country, why would they also care about how the United States as a whole does in relation to others? Existing studies in this vein have not been set up in a manner as to judge whether and how fairness matters in sociotropic assessments.

Drawing on research on "inequity aversion" at the individual-level we articulate and find evidence for what we call a "myopic fairness" argument. Fairness judgments are not simply endogenous to relative or absolute gains, in which respondents find fair that which most favors the United States. Nor are they purely objective and based entirely on perceptions of equality and equity. Instead Americans tend to regard as fairest, and indeed prefer, outcomes that are equitable and egalitarian, conditional on not feeling as though their country is falling behind. In this sense they are committed to fairness. However, their sense of fairness is myopic. Americans have difficulty applying fairness beyond themselves. They feel particularly aggrieved at the unfairness of outcomes that leave the United States relatively behind, but this sense of injustice does not apply symmetrically to the same injustice done to others. Fairness judgments are neither entirely self-serving nor entirely objective. Our results indicate that individuals apply the same standards of fairness – which are somewhat, though not completely biased – to their country's interaction with other countries as individuals do in their interactions with other individuals. The ethics of interpersonal interactions are identical to those of interstate interactions.

Based on previous research (Adams, 1965), we conceive of fairness in two ways: equality, in which outcomes are balanced, and equity, in which outputs are proportionate to inputs. Based on

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two novel survey experiments of several thousand Americans, we find that fairness conceived of as both equality and equity is an important factor in explaining attitudes toward trade deals. Our first study manipulates the equality of outcomes, and shows that our respondents as a whole are as supportive of trade deals in which both sides make equal concessions as they are of outcomes in which the United States makes fewer concessions than others. Fairness judgments are responsible for the difference in support between unfavorable and balanced trade concessions, and equally balanced concessions are viewed as the fairest. However, participants do not judge a scenario in which the United States makes fewer concessions than its trading partner as unfair as when the United States makes greater concessions. Their fairness judgments are not symmetric or objective.

Our second study adds in equity considerations, asking respondents to judge the fairness of a trade agreement based on the trade balance and the productivity of workers. The most fairly judged outcome of all, and that which receives the highest support, is a balanced trade flow in which workers are equally productive, with each side receiving a fair share for their hard work. This scenario scores higher in terms of fairness than balanced outcomes in which the workers in either country are more productive than the other. However, respondents most dislike outcomes in which the United States runs a trade deficit and equity cannot compensate for inequality. Even if American workers are less productive, their fairness assessments do not change. It is only when the United States runs a surplus that Americans feel the outcome is more fair if its workers are more productive. Consistent with the results from our first study, we find that the public is once again myopic in how they judge fairness.

We also find individual-level variation in fairness judgments consistent with the expectations of our argument. We hypothesize that those with more "cooperative internationalist" outlooks will be less myopic and those with higher degrees of national attachment more so. Cooperative internationalists indeed come closer to a pure fairness standard, assessing equal outcomes as considerably more fair than favorable ones. National identifiers, in contrast, differentiate less between the fairness of equal outcomes and favorable ones (although still consider the former fairer). Those low in national attachment demonstrate less asymmetry in their fairness judgments of favorable and unfavorable trade balances and concessions.

1 What We Gain from Thinking Differently about Gains

Human beings rarely consider any outcome with distributive consequences without reference to fairness. Indeed concerns about fairness – and its inextricable cousin, reciprocity – are thought to be so common as to be universal norms (Berg, Dickhaut and McCabe, 1995) and likely have biological origins in our evolved psychology. Behavioral economists have long been interested in fairness, finding it to be a powerful predictor of human behavior (Rabin, 1998; Fehr and Fischbacher, 2002). The now enormous literature on ultimatum games shows that across cultures and with varying stakes individuals will consistently reject unequal distributions of material goods because they find them unfair, even when this leaves them worse off in absolute terms (Oosterbeek, Sloof and Van De Kuilen, 2004). The results of ultimatum games, repeated with real stakes and replicated across dozens of different societies and cultures show that we do not assess the utility of different outcomes based merely on how we do but rather on how we do relative to others.

Considering the effects of fairness on attitudes toward trade has the potential to contribute to a persistent puzzle in international relations, which is that a significant portion of the public does not understand the effects of trade or is not well-informed about the specifics of trade, but nonetheless forms beliefs about trade (Guisinger, 2017, p. 42). Because fairness is such a foundational concept and people rarely assess distributive outcomes without reference to fairness, members of the public who may not understand the specific consequences of interstate economic relations may still come to a conclusion about whether a trade agreement or trade balance is fair. Fairness can help explain why those with low levels of knowledge about trade still form opinions about trade - often negative ones.

International relations scholars, however, are just beginning to come to terms with the role that fairness plays in interstate politics. Gottfried and Trager (2016) find that Americans generally have a preference for an equal, 50/50 split in a hypothetical territorial dispute with Russia, an outcome that even generates slightly greater support than a settlement tilted in the United States' favor. Kertzer and Rathbun (2015) show how fairness concerns impact interstate diplomacy; those who value fairness are predisposed to an equal exchange of concessions and punish others for not adhering to these norms of reciprocity. Bechtel, Hainmueller and Margalit (2017) demonstrate that a fairness framing generates opposition in German public opinion to lending funds to European countries experiencing debt crises. It is unfair to lend money to those who have behaved irresponsibly.

Rathbun, Powers and Anders (2018) find that individual-level commitment to fairness explains German opposition to further help for Greece.

To the extent that studies of trade opinion have engaged the issue of fairness, they have focused on "fair trade," defined as concerns about the effects of trade on "human rights, labor rights, or environmental standards" (Ehrlich, 2018) and the consequences of unrestricted free trade on the most vulnerable populations, both human and non-human. Most notably, Ehrlich and Maestas (2010) find evidence of a sizable minority of Americans who are willing to accept protectionist measures to mitigate these concerns. While this line of research has provided important insights into our understanding of trade attitudes, it only focuses on one aspect of fairness, one that might better be characterized as altruism. We seek to understand how other components of fairness influence trade attitudes.

The relational nature of fairness recalls earlier debates in international relations, in particular the "gains debate" between neorealists and neoliberals. Neoliberal institutionalists have made the case for the prospects of mutually beneficial cooperation, even in anarchic situations in which agreements cannot be enforced based on self-serving but far-sighted preference with the shadow of the future in mind (Keohane, 2005). Realists replied skeptically, arguing that absolute gains are not enough to induce states to make deals with others. Given the dangerous nature of international politics, states must be concerned not only that they do well but that that they do not fall behind (Grieco, 1988). This is similar to a concern with fairness. However, neorealists attributed this relative gain fixation to security concerns in that relative economic advantage could translate to relative military advantage, particularly dangerous in the anarchic realm. They make no reference to fairness at all, which might be the actual source of this comparative standard by which states judge economic negotiations.

Mutz and Kim (2017) have recently revived this framework, applying it to the mass political level, examining whether Americans as a whole are most supportive of outcomes that maximize the difference in the gains from trade between their country or another or whether they are primarily interested in absolute gains. Finding that there is an equal level of support in the treatment conditions in which 1) the US gains and the partner country loses and 2) the US gains and the trading partner also gains, they conclude that Americans are primarily interested in absolute gains. However, the framework does not allow them to test whether fairness considerations, a different type of relational standard, might matter. For instance, are Americans more supportive of a deal that leaves them less

well off absolutely but provides equal gains to both sides than they are of a deal that leaves them better off absolutely but relatively behind? Their results are consistent with a fairness argument but do not allow us to test the importance of this moral principle explicitly.

1.1 Fair is Fair?: The Meanings of Fairness

To understand fairness' potential role in trade attitudes, we must first come to terms with its multiple meanings. Theorists of fairness typically distinguish between three conceptions of fairness: equality, equity and need. Fairness under the former understanding is marked by balance, when all parties benefit equally or are treated equally in some collective endeavor. This is the conception of fairness that drives the findings in ultimatum games. We tend to reject splits that are not equal.

Equity, on the other hand, is fairness judged in terms of whether outputs reflect inputs. Are we fairly compensated given what we contributed to some collective process? In a business setting, this is generally reflected in whether a worker or employee's compensation is commensurate with her productivity. Equity concerns explain human beings desire to punish free riding. Others should not enjoy the fruit of social cooperation without contributing to the group. We do not want to split the pie evenly if it means that those who did not contribute to the cooking get to eat it (Adams, 1965; Anderson and Patterson, 2008; Deutsch, 1975).

Finally, fairness as need aims at rectifying imbalances by giving special treatment to a disadvantaged individual or group to bring it into line with others. This is the underlying motivation of what is often referred to as the "fair trade" movement mentioned above. It aims to create equality where there was inequality by favoring the weak and vulnerable over others – that is by treating members of the collectivity unequally to establish equality in outcome.

When it comes to trade, equity and equality conceptions typically converge in the notions of "fair play" and a "level-playing field." Consider the ideal type of a free trade area. Both sides completely remove their trade barriers so that all products are treated equally. The gains from trade will exhibit fairness as equity in that they accrue to those that produce most efficiently. Complaints about an unfair lack of access to foreign markets could therefore indicate a concern for both equality and equity. If the United States has lowered tariffs and this has gone unreciprocated by others (fairness as equality), American producers will not reap the gains from trade that they deserve as a function of their hard work (fairness as equity). The same logic applies to non-tariff barriers as well. For instance, subsidies tilt the playing field (fairness as equality), thereby leading to imbalances in trade

that do not reflect efficient production (fairness as equity).

However, fairness as equality and equity are sometimes in tension. Seen in terms of equity, one might rightly and justly expect winners or losers in any competitive endeavor based on different levels of effort. So long as the playing field was equal, that is fair. However, this might result in asymmetric gains that by a different benchmark for equality – for instance, gains in jobs or the trade balance – might be perceived as unfair.

1.2 What Presidents Mean by Fairness

Which conception of fairness do American Presidents have in mind when they speak of fair trade? Using the American Presidency Project's online search tool, we compiled a database of all references to the term "fair trade" since the modern multilateral trade regime came into being, with the coming-into-force of the General Agreement on Tariffs and Trade on January 1, 1948. The Presidency Project has digitized the Public Papers of the Presidents, which contain most of the President's public messages, statements, speeches, and news conference remarks. Documents such as proclamations and executive orders are included beginning with the administration of Jimmy Carter. We removed statements made by the Presidents before they were elected president, such as on the campaign trail, but included any remarks they made as president-elect before sworn into office. We also did not include remarks by surrogates such as the Vice President or press secretaries.

So as to leave aside for a moment the various ways in which equality is measured in trade and its potential relationship with equity, we coded the statements into three categories: 1) references to fair treatment and lack of a level playing field, such as unequal market access or protectionist behavior on the part of other countries, 2) references to "unfair" trade imbalances without reference to the underlying behavior giving rise to the asymmetry (generally unequal treatment), 3) references to a lack of fairness in terms of a deleterious effects on the environment, labor or the global South, what we think of as fairness as need. A few statements contained references to more than one category. Most statements, however, simply made passing reference to support for fair trade and were not codeable since they gave no further indication of what was meant by this. The breakdown of presidential statements regarding fair trade are displayed is Table 1.

Table 1: President's Fair Trade Statements

	Total	Codeable	Fair Treatment	Unfair Balances	Environment, Labor and Development
Truman	5	0	0	0	0
Eisenhower	1	0	0	0	0
Kennedy	1	0	0	0	0
Johnson	1	0	0	0	0
Nixon	3	0	0	0	0
Ford	8	0	0	0	0
Carter	6	0	0	0	0
Reagan	101	25	23	1	1
Bush	112	17	17	0	0
Clinton	96	13	10	0	3
G. W. Bush	178	25	25	0	0
Obama	25	6	3	1	3
Trump	47	10	10	1	0
Total	584	96	88	3	7

A number of results stand out. First, American Presidents talk about fair trade a lot and increasingly so over time. There are hundreds of uses of the phrase, most of which have occurred in recent decades. Most of the time they are doing so without any real explication of what they mean. This is not surprising, but the fact that the phrase is so ubiquitous and commonplace shows how uncontroversial, and therefore intuitively justified, it is. Second, of the 96 codeable statements, the overwhelming predominance complained about a lack of fairness when it comes to the treatment of American goods – that is, unequal treatment (88 of 96, or 92%). We can see that when American Presidents talk about fair trade, they overwhelmingly have fair treatment in mind.

To provide greater context to the coding of presidential rhetoric, here are four representative quotations from four different presidents who invoked fairness when discussing trade, each of which makes reference to to equal treatment.

That's why our motto is: free and fair trade with free and fair traders. Now, we've seen

that governments sometimes don't play by the rules. They keep exports out of subsidy–or subsidize, I should say, industries, giving them an unfair advantage. Well, our patience with unfair trade isn't endless, and we're taking action to bring other nations back in line to ensure that free trade remains fair trade. We're aggressively using existing trade laws to pry open foreign markets and force others to play by the rules....Because, believe me, when Americans are competing on a level playing field, they can outproduce and outsell anyone, anywhere in the world (Reagan, 1986).

We need a level playing field when it comes to trade. This country can compete with anybody, anytime, anywhere with free trade and fair trade, and that's exactly how I will continue to lead (Clinton, 1994).

Reasonable policy says to nations, you treat us the way we treat you. That's all we're asking for. We're saying to countries, if your goods and services are coming here – which, by the way, are good for our consumers; like if you're a consumer, you want a lot of choices, you want a lot of different options. But we want to be treated equally too. Good trade policy is fair trade policy (Bush, 2008).

What we want is fair trade–fair trade. And we're going to treat countries fairly, but they have to treat us fairly. And if they're going to charge tax to our countries [companies; White House correction.]–if, as an example, we sell a car into Japan and they do things to us that make it impossible to sell cars in Japan and yet they sell cars into us and they come in, like, by the hundreds of thousands on the biggest ships I've ever seen, we have to all talk about that. It's not fair (Trump, 2017).

Of the 96 codeable statements, relatively few referred to the sets of concerns typically grouped under the label of fair trade, such as concern for the environment, human rights, etc. There were however 17 references made by George W. Bush to fair trade in the context of how trade is a strong force for development and rising prosperity in developing countries, but since this does not fully capture the typical manner in which fair trade is talked about by its progressive advocates, we did not include these in the coded categories. Whereas advocates of fair trade who seek to protect the environment, human rights, and economic opportunity typically complain that unrestricted, open and unfettered exchange across borders privileges large multinational corporations at the expense of

more vulnerable populations and thus they advocate for trade restrictions, President Bush was calling for freer markets. However, even if Bush's 17 statements are counted in the "labor, environment, and development" category, that category would still compose only 21 percent of the coded statements. Furthermore, Presidents almost never complain merely about the trade balance when they talk of fair trade. Only three times did they mention the trade balance alone without making reference also to a level playing field. In other words, they associate trade deficits with unfair competition.

These results tell us first that we are on solid ground in considering the role of fairness in trade rhetoric, since it is repeatedly invoked by Presidents from across parties. It also alerts us to the fact that in complaining about fairness, American presidents typically have in mind unequal access to markets. However, they do sometimes speak of imbalanced trade flows. We utilize both in our trade scenarios below.

2   Myopic and Subjective Fairness Judgments

With these conceptions of fairness in mind, we can begin to develop hypotheses to judge whether fairness is important in explaining American trade attitudes. Americans might regard as most fair and prefer trade outcomes in which the benefits from trade or the tariff concessions are equal (the pure equality perspective) or those in which they reflect the relative inputs made by both sides (the pure equity perspective). We call this a "pure fairness" argument, one in which fairness, however it is conceived, is considered objectively by the abstract principle of either equality or equity. Pure fairness would have us be detached observers willing to accept that fairness might not favor our interests. This is the standard for fairness used in Herrmann, Tetlock and Diascro (2001) study on trade and the strongest effect that fairness might have.

In contrast, fairness might be completely self-serving and subjective. It might be that what we find most fair is that which most benefits us. Based on earlier findings that Americans prefer outcomes that leave the United States better off (Mutz and Kim, 2017; Mansfield and Mutz, 2009), it could be that Americans find these outcomes to be fairer than those that reflect either the principles of equity or equality. If so, fairness would serve as a post hoc rationalization of interest and offer little in terms of explanation. We call this the "endogeneity of fairness" argument.[1]

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[1]Such a phenomenon could be either instrumental or consistency-seeking in nature. In the former case, individuals would care little about ethics; in the latter they would feel the need to justify to themselves and others their greater share. Some research in social psychology suggests such a self-

Nevertheless, there are a number of reasons to be skeptical of both a crude endogeneity and a pure fairness hypothesis. The literatures on prospect theory, relative deprivation, and social comparison theory allow us to articulate more nuanced predictions of trade attitudes that take seriously the possibility that fairness judgments might be biased so as to favor oneself but nevertheless not be reducible to pure self interest. We call this a "myopic" conception of fairness – one that is subjective and particularly sensitive to slights to oneself, but not so biased as to simply judge fairness after the fact based on whether one came out ahead. In this conception, Americans would be self-involved, but not purely self-interested. They would not be blind to fairness, but near-sighted, better capable of seeing injustices done to them than to others who are far away.

A large number of studies in social comparison theory consistently find that we assess outcomes not based on some objective standard, but rather in relation to how others are doing. In other words, we are naturally inclined to judge any allocative outcome not by how much we gain, but by how much we gain relative to others. A related literature on "relative deprivation" picks up this same theme of relative assessments, but highlights how individuals particularly dislike feeling as if they are lagging behind others. In other words, relative gains bring us less pleasure and satisfaction than the equivalent relative loss brings us dissatisfaction and pain. Relative deprivation researchers have found consistent evidence of such a phenomenon both in terms of how individuals judge their personal standing in a group (egoistic relative deprivation) and also in intergroup relations (fraternal relative deprivation), when they compare their ingroup to another group (Crosby, 1976). The key takeaway is the "need to differentiate between the motivation to get ahead and the motivation not to fall behind," with the latter being much more important (Halevy et al., 2010). Lu and Scheve (2016) found evidence consistent with this myopic view of fairness in a study of domestic tax policy, which showed that in the United States there is "strong evidence of disadvantageous inequality aversion but not advantageous inequality aversion", suggesting that the American public is much more concerned with falling behind or being at a disadvantage than they are of having others fall behind.[2]

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serving process in determinations of fairness (DeScioli et al., 2014). When placed for instance in a hypothetical bargaining setting based on a real life court case, in which individuals are randomly assigned to plaintiff and defendant roles and given the same information, participants tended to see their own side as having a better case, predict the judge will rule in their favor and regard a fair outcome as one that tilts in their favor (Babcock and Loewenstein, 1997; Babcock et al., 1995).

[2]The findings of relative deprivation theory are buttressed of course by an enormous literature in prospect theory that consistently finds that individuals are much more sensitive to losses than gains (Tversky and Kahneman, 1992). Many researchers have gained purchase with this framework in

Importantly, relative deprivation puts a particular emphasis on the role played in judgment by feelings of "deservingness." Those who are lagging behind generally feel like they deserve to be in a better position. In other words, they find their current relatively poor standing to be unfair. This suggests that individuals will be likely to judge outcomes in which they suffer relative losses as particularly unfair and that this will lead to lower support for such outcomes.

Crucially, in the relative deprivation literatures, feelings of injustice and unfairness are asymmetric. Individuals are attuned to how they or their group are being wronged, but not to whether the same is occurring to others. However, the relative deprivation literature also leads us to think that individuals will not necessarily judge outcomes in which they benefit more in relative terms as fairer than more equitable and equal outcomes.

The most important motivation in relative deprivation and social comparison is not that one benefits more, but that one does not fall behind. If this is the case, fairness judgments would not be completely endogenous to our interests and therefore inconsequential. So long as individuals are not in the domain of relative losses, they will be more (but not completely) objective about fairness. They will not find a skewed outcome in their favor as fairer than an equal one unless they contributed more, and they might regard an equal one in which both sides contribute equally as particularly fair based on the principle of equity.

Behavioral economists have used this same research to develop models of "inequity aversion." Individuals often exhibit a particular type of "social preference": "[T]hey are altruistic towards other persons, i.e., they want to increase the other persons' material payoffs, if the other persons' material payoffs are below an equitable benchmark, but they feel envy, ie, they want to decrease the other persons' payoffs, when the payoffs of the others exceed the equitable [i.e., equal] level" (Fehr and Fischbacher, 2002). Studies show that individuals exhibit aversion to "disadvantageous inequality," that is outcomes that leave them relatively behind, but are not supportive of "advantageous inequality," that is outcomes that leave them ahead. In experiments that manipulate the gains from allocative games they find highest support for the equal outcome and this outcome is also judged the most fair (Loewenstein, Thompson and Bazerman, 1989). However, their distaste for outcomes that leave them relatively worse off is much stronger than their distaste for outcomes that leave them relatively better off. Lü, Scheve and Slaughter (2012) find evidence for this phenomenon

international relations (Boettcher III, 2004; Butler, 2007; McDermott, 1998; O'Neill, 2001). In the social comparison and relative deprivation schools, it is relative, rather than absolute, losses that are of most importance, a distinction generally not made in the prospect theory literature.

in a trade setting, however one that looks at preferences for the distribution of gains domestically. Inequity aversion helps explain the pattern of trade protectionism whereby protection of those with the lowest incomes in a society consistently receives strong support. We seek to extend this research into an interstate context in which respondents are asked to assess the distribution of gains for their country and others.

Based on these previous findings, we can develop a more nuanced myopic fairness argument that stands in contrast to both the "pure fairness" and the "endogeneity of fairness" arguments. Based on previous work (Mansfield and Mutz, 2009), we take as our starting point the general American-centric, sociotropic quality of American trade preferences, in which the mass public is generally interested in how the United States fares. A number of studies have now established that trade attitudes cannot be reduced to just personal pocketbook considerations. Rather Americans seem to judge trade agreements by how they effect the United States as a whole. Ingroup/outgroup dynamics seem to play a considerable role (Mutz and Kim, 2017). Nevertheless, fairness has been left out of almost all of these studies, which we find surprising considering its role in the rhetoric of government officials, not just in the United States, as well as the strongly documented importance of fairness in human decision making we reviewed above. We start from the premise that in the population as a whole, Americans will think about what is fair in view of what is fair to the United States. And they will do so in the same way that they approach fairness in their interactions with others, that is through a myopic lens.

The myopic fairness argument has three primary expectations. First, Americans will judge as particularly unfair outcomes that leave the United States worse off in relative terms. Second, an important difference from the "endogeneity of fairness" argument is that they will not simply regard outcomes that leave the United States relatively or absolutely better off as particularly fair. Third, they will not extend the same sense of injustice to outcomes that leave trading partners relatively worse off, differentiating the myopic from a "pure fairness" argument. We expect that this same myopia will apply to their consideration of equity. Americans will not be willing to regard outcomes that leave them relatively behind as fair, even if such outcomes reflect their inputs. However, they will regard as more fair outcomes in which equal gains reflect equal inputs or relative gains reflect greater American productivity.

3 Methods

To evaluate the significance and conception of fairness with regard to international trade, we introduce two survey experiments meant to capture the importance placed on fairness by the American public when thinking about trade. Our first study deals with the role played by fairness as equality, considered in terms of relative tariff concessions. Our second considers equality in terms of trade balance, but also introduces the element of equity, conceptualized in terms of relative worker productivity. We first describe the structure and samples of our experiments and then discuss the details of each study in turn with hypotheses specified for each theory.

We use survey experiments to test our theory, since they allow us to isolate the causal effect of key components of our theory and evaluate what aspects of international trade and trade agreements alter perceptions of fairness and support for trade agreements. Although there are a number of high-quality public opinion polls that regularly ask about attitudes toward trade and globalization, such observational data has certain weaknesses in disentangling the myriad of factors that may influence attitudes toward trade and fairness. In particular, such polls do not ask about perceptions of fairness, and even those focusing on support for trade cannot isolate the role of fairness in driving changes in public attitudes. Our study joins a growing body of research on attitudes toward foreign policy, trade, and globalization,[3] and uses experiments to help us to better understand how citizens form beliefs about fairness and international trade.

The surveys were fielded with Survey Sampling International (SSI) in the fall of 2017 on a sample of Americans that is broadly representative based on demographics such as age, education, income, and gender (see appendix, page 1, for sample characteristics).[4] The studies were fielded as part of an omnibus panel-study conducted in late 2017, with 3,136 respondents completing our first experiment and 3,201 completing our second experiment. The broader panel recruited over 6,000 respondents in the first wave in November of 2017, with approximately half the respondents being randomly assigned to our study. The second wave of the panel sought to have at least 3,000 respondents participate, with all respondents participating in our second study.[5]

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[3]For examples, please see: Bearce and Cook (2017), Ehrlich and Maestas (2010), Guisinger (2017), Malhotra, Margalit and Mo (2013), and Margalit (2012).

[4]For a sample of published political science studies using SSI, please see Berinsky, Margolis and Sances (2014), Brutger, and Kertzer (2018), and Kertzer and Brutger (2016).

[5]SSI uses an opt-in recruitment method, after which respondents are randomly selected for survey invitations, using population targets as opposed to quotas to achieve diverse national samples.

Study 1

Our first study tests how changes in the concessions made by each party to a trade negotiation impact perceptions of fairness and support for the trade agreement. As discussed earlier, unequal tariff rates are key complaints in the campaign against unfair trade, and thus we vary the tariff concessions made by the U.S. and another country. Our analysis begins by looking at the effects of three treatment conditions of interest, which are whether the tariff concessions are *Equal*, *Favorable*, or *Unfavorable*. The equal treatment is designed so both parties make the same concessions, whereas in the favorable treatment the other country makes a larger concession than the U.S., and in the unfavorable treatment the U.S. makes a larger concession than the other country.[6] To create these treatment conditions, we randomly varied the concessions each side made, such that each side could make a 30 percent, 60 percent, or 90 percent cut to their tariffs.[7] This meant that the equal treatment includes equal concessions of 30/30, 60/60, and 90/90 by both sides. The favorable treatment includes concessions of 30/60, 60/90, and 30/90, where the first number is the percent tariff cut by the U.S. and the second is the percent cut by the other country, and the unfavorable treatment is the inverse of the favorable treatment.[8] After analyzing the effects of the equal, favorable, and unfavorable treatments, we progress to a more nuanced analysis of the nine treatment combinations, which allows us to test the effect of absolute and relative concessions on attitudes toward the trade agreement.

The text of the experiment is as follows:

The U.S. is considering negotiating a trade agreement with one of its trading partners.

The trade agreement will decrease the average tariffs – that is the tax charged by the

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[6]We recognize that from an economic perspective where trade liberalization can create gains from trade, asymmetric reductions in tariffs may not necesarily be economically favorable or unfavorable, however, we use these terms since they are consistent with the political rhetoric surrounding the issue.

[7]We recognize that using tariff concessions has two primary limitations. The first is that some respondents may struggle to interpret percentations, but this would bias against finding a result, making this a relatively harder test for our theory. The second is that the scenario does not provide tariff baselines, which we find is generally consistent with how leaders discuss tariff cuts, but nonetheless may limit respondents ability to evaluate the relative fairness of the concessions. We address both of these concerns in our second study, which has the advantage of presenting the relative relationship in terms of trade balances, as opposed to percentages of tariff cuts, which is perhaps more easily understood by respondents and avoids any complications of what the initial baseline of the tariffs might have been.

[8]In the appendix, pages 2-3, we conduct balance tests that demonstrade our random assignment achieved a well balanced study across treatment conditions.

American government on foreign goods entering the United States – by [30, 60, *or* 90]
percent. In return the trade partner will decrease their tariffs on imports from the U.S.
by [30, 60, *or* 90] percent.

After reading about the trade agreement, participants were then asked whether they would
support or oppose the agreement, with responses ranging from "strongly support" to "strongly
oppose" on a five-point scale. Respondents were also asked to consider how fair they thought the
trade agreement was, with responses ranging from "very unfair" to "very fair" on a five-point scale.

Based on the discussion above, we deduce the following hypotheses. The "pure fairness" argument would expect that, absence any kind of other marker of fairness, such as an equity consideration
not primed in this study (but which is illicited in the next study):

H1: All else equal, trade deals in which the United States and another country gain or
sacrifice equally will be judged more fair than unfavorable or favorable deals.

This leads to the expectation that the equal concession treatments, where each side reduced their
tariffs by 30/30, 60/60, or 90/90, will be regarded as fairer than the other treatments, even those
that benefit the United States more in relative terms. Americans will regard as fairer a reciprocal
trade reduction of 30 percent to one in which the United States cuts 30 percent while the other side
cuts more than this.

An important counterargument is that fairness judgments might be self-serving in that people
morally justify what benefits them the most, either for instrumental or consistency-seeking reasons.
This "endogeneity of fairness" hypothesis has the expectation that:

H2: Trade deals in which the United States benefits more than another country will be
judged to be the most fair.

This might take two forms depending on whether respondents understand national interests in
absolute or relative terms. To isolate the former, we evaluate whether fairness judgments are highest
in the 90/90 treatments, and lowest in the 30/30 conditions, with intermediate judgments in the
60/60 treatment. If H2 is correct and people prefer absolute gains, then the 90/90 treatment should
receive the highest fairness ratings. However, if relative gains drive fairness judgments, the 30/90
treatment will be regarded as the most fair and the 90/30 outcome as the least fair, and the equally
balanced outcomes will be considered less fair than favorable ones.

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Finally, the myopic fairness hypothesis expects peoples' perceived injustice to increase as their relative losses increase. However, this sense of unfairness will not apply to relative losses suffered by others given that we expect fairness to be myopic, meaning that the unequal distribution in favorable trade agreements will be viewed as less unfair than unfavorable deals. Since the primary motivation for a myopic sense of fairness is that individuals don't want to feel as though they are falling behind, we would expect equality concerns to be relatively pure, unless the person is in an unfavorable position where they are getting less than someone else. Thus, equal trade deals should be perceived as most fair, followed by favorable ones, with a significant decline in perceived fairness for unfavorable deals.

> H3: Trade deals in which the United States and another country gain or sacrifice equally will be judged the most fair, with favorable trade deals in which the United States benefits more as the next most fair, and unfavorable trade deals in which the United States benefits less than another country judged the least fair.

Of course it might be the case that the terms of trade deals affect perceptions of their fairness, but fairness considerations do not matter at all in determining support or opposition to free trade. In other words, trade support and trade fairness could be entirely different questions. In contrast to this conceptualization, we hypothesize instead a mediating relationship:

> H4: Perceived fairness of trade deals will be a significant mediator of support for the trade deals.

Our first analysis of the results shows that the absolute gains version of the endogeneity of fairness argument does not hold up. If people believe that trade deals that benefit them more are fairer, and they are focused on absolute gains, then we would expect fairness scores to increase when moving from the 30/30 concessions to the 60/60 and then the 90/90 trade deals. However, as is shown in Figure 1, there are no statistically significant differences in fairness or support across these treatments.[9] These findings are consistent with concepts in social comparison theory, where as long as someone is doing as well as the comparison group, and importantly that they are not falling behind, then the absolute level of gains are not the most significant factor influencing their evaluation of the situation. This is a particularly striking result, since it demonstrates that absolute gains don't

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[9]The greatest difference in perceived fairness between equal agreements, which is between 30/30 and 90/90, does not approach statistical significance (0.08, $p < 0.24$).

matter for perceptions of fairness or support, and is strong evidence against the endogeneity of fairness hypothesis.

Figure 1: Fairness and Support for Balanced Treatments
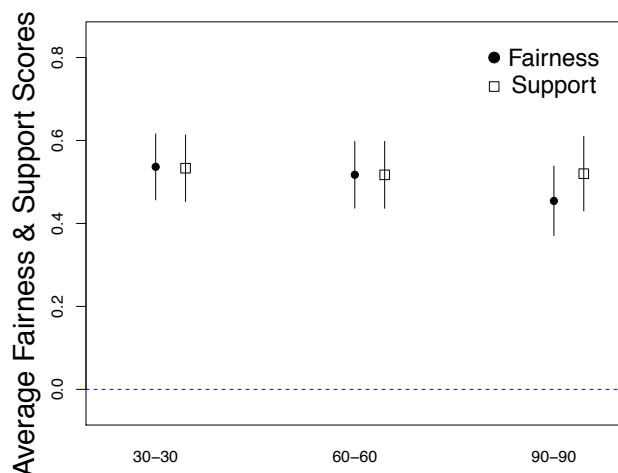
Note: Figure 1 displays the average support and fairness scores by treatment type, measured from -2 to 2, with 95 percent confidence intervals. Higher values represent greater levels of support/fairness for the trade agreement. None of the differences in fairness or support approach statistical significance

We next evaluate the relative gains version of the endogeneity of fairness argument by comparing the fairness judgments of our equal, favorable, and unfavorable treatments, which are shown in Figure 2. We find that the equal balance of tariff concessions is viewed as the fairest outcome, evidence against H2, since respondents do not view the favorable agreement as being the most fair.

To test the most likely case for the endogeneity of fairness, we examine whether the 30/90 trade deal, where the U.S. makes the smallest concession and the other country makes the largest concession, is viewed as fairer than the balanced agreements. However, even this most favorable trade deal is viewed as significantly less fair than all of the equal trade deals, regardless of whether they were 30/30, 60/60, or 90/90.[10]

This means that our respondents are not using the concept of fairness to simply justify whatever gives them the greatest relative gains. However, they do differentiate between "falling behind" in the unfavorable trade deal, as opposed to when the other side falls behind. This demonstrates our respondents are myopic in that they prefer and regard as fairer an agreement in which others suffer relative losses than when the United States does. We find support not for pure fairness (H1), but

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[10]The most favorable trade deal's fairnes score is 0.18 ($p < 0.01$) *lower* than the 90/90 equal deal, and the difference is even greater for the 30/30 and 60/60 trade deals.

Figure 2: Perceived Fairness by Treatment
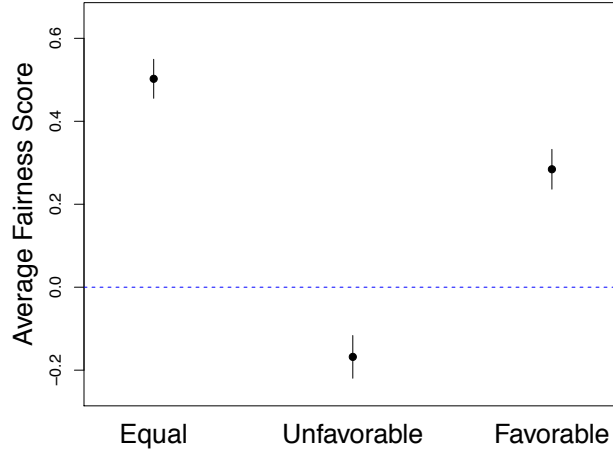
Note: Figure 2 displays the average fairness score by treatment type, measured from -2 to 2, with 95 percent confidence intervals. Higher values represent greater levels of fairness for the trade agreement.

for a myopic fairness argument (H3).

A similar pattern is also evident in overall support for different agreements. Remarkably, Americans are equally content with equally balanced agreements and favorable ones. As is shown in Figure 3, support for an equal agreement, where both sides make the same concessions, is as high as if the U.S. had negotiated a favorable agreement. Fifty-one percent of the respondents support the equal agreement, which is 20 percentage points higher than support for the unfavorable agreement ($p < 0.00$).[11] Furthermore, the difference between the percent of respondents supporting the equal and favorable agreements is statistically insignificant (one percent difference, $p < 0.47$), showing that the public is equally willing to support an agreement where the concessions are equal or favorable to the U.S.[12]

We find further support for this pattern by examining how the severity of the imbalances in the unfavorable deals impact perceived fairness. The results are displayed in panel "a" of Figure 4, which show that respondents view it as especially unfair when they fall furthest behind in the 90/30 treatment. The drop in perceived fairness from the 60/30 treatment to the 90/30 treatment is -0.23 ($p < 0.00$) and the drop in the fairness score from 90/60 to 90/30 is 0.12 ($p < 0.10$), showing that

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[11]In this context, we count people as supporting the agreement if they "somewhat" or "very strongly" supported it.

[12]Comparing the overall support score, the difference between the equal and favorable treatments is also insignificant (-0.04, $p < 0.32$).
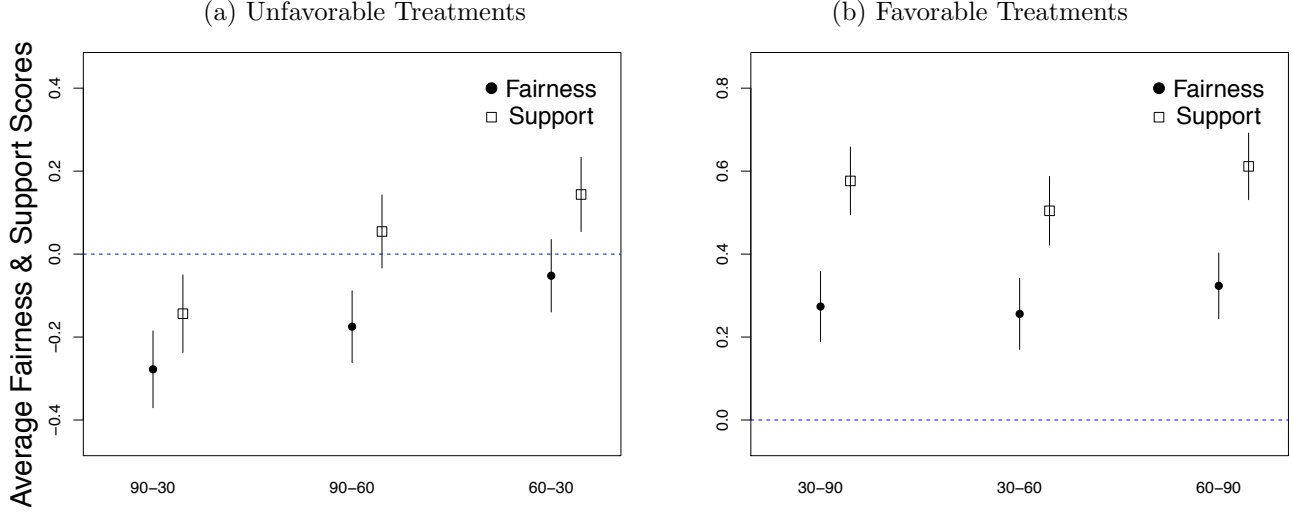
Figure 3: Support by Treatment
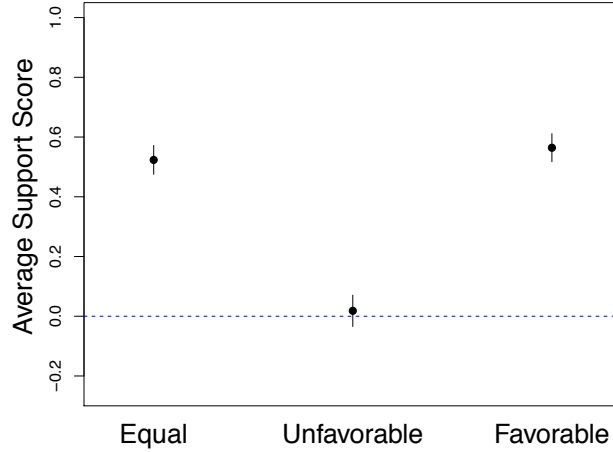
Note: Figure 3 displays the average support score by treatment type, measured from -2 to 2, with 95 percent confidence intervals. Higher values represent greater levels of support for the trade agreement.

the public believes it is increasingly unfair when they give up more than the other country. This is in contrast to the stable perceptions of fairness across all favorable trade deals, which are shown in panel "b" of Figure 2, where there are no significant differences in perceived fairness.[13] These results support the myopic fairness hypothesis and provide evidence against the pure fairness hypothesis. So long as the United States does not fall behind, Americans are indifferent to how much they gain, both absolutely and relatively in terms of their fairness judgments and their overall level of support for different trade outcomes.

We now shift to an examination of H4, formally testing whether perceived fairness is in fact a statistically and substantively important mediator of support using nonparametric causal mediation analysis (Tingley et al., 2014). A discussion of the mediation analysis is included in the appendix, pages 6-7. In Figure 5, we display the average causal mediation effect (ACME) of fairness, average direct effect of the treatment (ADE), and the total effect on support for the trade agreement. We find that when comparing the equal treatment to the favorable treatment, perceptions of fairness have a strong positive causal mediation effect on support for the agreement (ACME: 0.15, $p < 0.00$). The positive effect of fairness offsets the negative direct effect of moving from the favorable agreement to the equal agreement. While the direct effect of a relative gain for the United States leads to

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[13]The difference between favorable treatments that comes closest to being significant is the 60/90 to 30/60, which is 0.07 ($p < 0.34$)

Figure 4: Support by Treatment

(a) Unfavorable Treatments   (b) Favorable Treatments

Note: Figure 4 displays the average fairness and support scores by treatment type, measured from -2 to 2, with 95 percent confidence intervals. Higher values represent greater levels of fairness and support for the trade agreement. The drop in perceived fairness from the 60/30 treatment to the 90/30 treatment is -0.23 ($p < 0.00$) and the drop in the fairness score from 90/60 to 90/30 is 0.12 ($p < 0.10$). None of the differences among the favorable treatments approach significance. The difference between the 60/90 and 30/60 comes the closest at 0.07 ($p < 0.34$).

greater support for the agreement, this effect is offset, and the two are judged equally favorable, when the meditation effect of fairness is taken into account. This illustrates that Americans are willing to sacrifice gains for their own country for this ethical principle. The importance of fairness is further emphasized when comparing the equal treatment to the unfavorable treatment, where the mediation effect of fairness is responsible for the entire increase in support for the agreement that results from shifting from an unfavorable to an equal trade agreement (ACME: 0.50, $p < 0.00$). This is exactly what we would expect if fairness were myopic. Disapproval is attributable to unfairness. Lastly, the results also show that fairness is responsible for about 60 percent of the increase in approval that results from moving from an unfavorable to a favorable agreement (ACME: 0.44, $p < 0.00$). This mediation effect is less than comparing an unfavorable to an equal outcome. We would not see this difference if respondents were merely post-hoc rationalizing any choice as fair. If this were the case, we would see no difference in the ACME across the conditions. Overall, these results demonstrate that how fair individuals believe international trade agreements are significantly impacts the likelihood of supporting such agreements.

Figure 5: Mediation Analysis

(a) Equal vs. Favorable

(b) Equal vs. Unfavorable
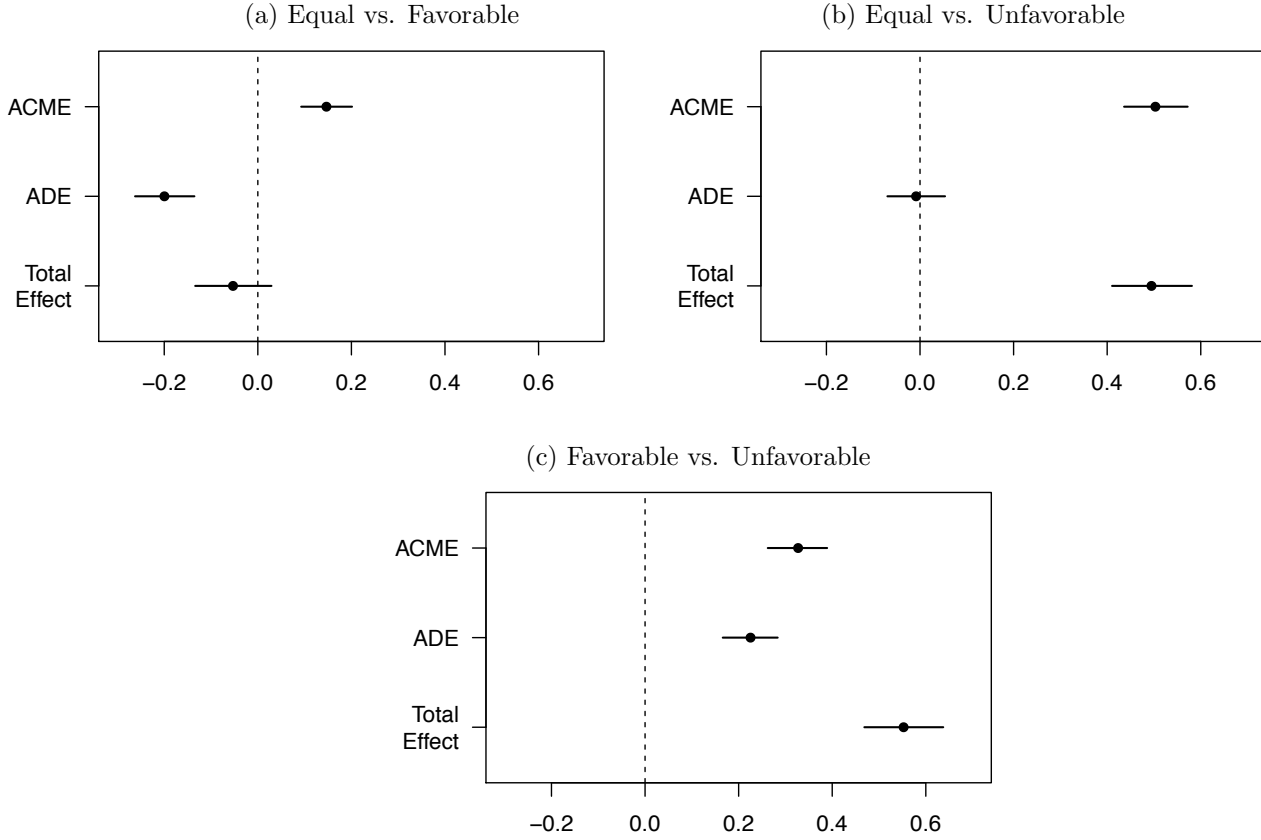
(c) Favorable vs. Unfavorable

Figure 5 plots the Average Causal Mediation Effects (ACME), the Average Direct Effects (ADE) and Total Effects from a series of nonparametric mediation models in which the effect of each treatment on support for the trade agreement is mediated through perceived fairness of the agreement. Both support for the agreement and fairness of the agreement are measured on a five-point scale, where higher values represent more support and higher perceived fairness. Analysis conducted using the `mediation` package by Imai et al. (2010), and includes controls for the following pretreatment covariates: age, education, income, political party, gender, national attachment, and cooparative internationalism.

Study 2

As mentioned above, equity is also a powerful conception of fairness, one that often arises in competition with fairness conceived in terms of equality. In domestic politics, for instance, we routinely observe disputes over the distribution of resources based on these contending conceptions of fairness. Under an equity standard for instance those who work the hardest should receive the most benefits, or at least not be penalized for their hard work, a concern frequently noted at tax time. However, a number of studies indicate that individuals pick and choose their conception of fairness to suit their interests, a corollary of the endogeneity hypothesis above. DeScioli et al. (2014) randomly assigned survey respondents into one of two roles: typists who transcribed three paragraphs and checkers who proofread one of the three paragraphs. The typist was then given the choice of dividing earnings for the task equally, based on the equality conception of fairness, or based on equity, in which the typist received 75 percent of the money. Typists typically judged the equity option as more fair, whereas checkers judged equality to be fairer. A follow-up experiment in which participants were asked to judge the fairness of allocation options both before and after they knew their role found that individuals often changed their mind so as to match their fairness judgments with their interests. This confirms previous research that conceptions of fairness are often self-serving (Messick and Sentis, 1979).

In terms of trade, the possibility that equity conceptions of fairness might drive attitudes raises a number of questions. Are Americans willing to accept unequal outcomes in terms of the tangible benefits of trade if they reflect relative effort, even when the United States comes out behind, which we would call a pure equity argument? Do they judge fairness in isolation from equity considerations based on the distribution of gains? Or does equity matter more when the United States comes out relatively ahead (or behind) in a trade agreement suggesting an interaction of equity and equality?

Our second study was launched two weeks after the first, and expanded to include equity in addition to equality conditions. Unlike the first experiment, the second study was about a trade agreement the U.S. was already a party to, where the agreement led to either an equal, unfavorable, or favorable balance of trade between the U.S. and the other country. As mentioned above, trade balances are important metrics by which trade agreements are judged as fair from an equality perspective. This design allows us to assess whether evaluations of fairness are consistent across different aspect of trade agreements, comparing perceptions of tariff concessions from the first study

to trade balances in the second.

In the second study, the randomization of the trade-flows were described such that the "agreement has led to a 2 to 1 trade imbalance favoring the United States, in which the United States exports twice as much as it imports from the other country," or it has led to a "2 to 1 trade imbalance favoring the other country...", or it has led to "a relative balance in trade between the two countries." Below we refer to the first as "favorable," the second as "unfavorable" and the last as "balanced." In this manner, the balanced, favorable, and unfavorable treatments are conceptually consistent with those tested in the first study, but are tied to the resulting trade flows between the countries, as opposed to the concessions made during the negotiations. This study also has an extra advantage of presenting the relative relationship in terms of trade balances, as opposed to percentages of tariff cuts, which is perhaps more easily understood by respondents and avoids any complications of what the initial baseline of the tariffs might have been.

We introduce an equity element as well. To test the effect of equity we might have experimentally manipulated variables such as foreign subsidization of domestic industries or other non-tariff barriers to trade. However, since equity is about the work put in and the relative output, we instead utilized a more intuitive manipulation, one based on relative worker productivity. The three potential productivity treatments specified that either "American workers are twice as productive as the workers in the other country," or "workers in the other country are twice as productive as workers in the United States," or "workers in both countries are about equally productive." Work effort and contribution are central to equity considerations of fairness, and lend themselves naturally to a trade scenario.

To verify that the productivity treatment was interpreted in a manner consistent with our theory of equity, we analyzed the free responses provided by respondents and conducted an additional study evaluating the importance of productivity relative to other potential components of equity, which we discuss in the appendix on pages 3-5. Our analysis shows that respondents interpreted productivity to mean how hard working the workers in each country were, which is consistent with our conception of productivity as being central to equity in trade relations.

In sum, the design of our second study thus acts as both a robustness check of how the public reacts to equally balanced, favorable, and unfavorable trade agreements, while also allowing us to test our additional hypotheses about perceptions of equity and fairness as they relate to international trade.

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While the full treatment conditions for the second study are included in the appendix, page 3, an example of the wording of one of the treatment combinations, with a favorable trade balance and productive American workers is as follows:

> The United States is part of a free trade agreement in which the United States and the other country reduced its tariffs – that is, the tax charged on foreign goods and services when they cross borders. The agreement has led to a 2 to 1 trade imbalance favoring the United States in which the United States exports twice as much as it imports from the other country. Studies show that American workers are twice as productive as the workers in the other country.

After reading about the trade agreement, the second study then asked respondents whether they would support *renegotiating* the agreement. In each case respondents could select from "strongly support" to "strongly oppose" on a five-point scale. Respondents were also asked to evaluate their perceived fairness of the trade agreement, as they were in the first study. We begin by laying out extensions of our earlier hypotheses that now account for equity considerations as well. Our presentation of results then examines weather the earlier findings are corroborated in the second study and which of the equity based hypotheses are supported.

The introduction of issues of equity might alter the pattern of results expected by a "pure fairness" argument. Unequal outcomes might become more acceptable if the distribution of gains corresponds to productivity. The introduction of equity could lead to two possible outcomes depending on how our respondents choose to weigh equality and equity considerations. In a "pure equity" formulation, outcomes would be based solely on the alignment of inputs to outputs. The favorable/productive, unfavorable/unproductive and balanced/equal treatments would have the highest fairness scores, whereas the favorable/unproductive and unfavorable/productive treatments would have the lowest. The remaining treatments would fall in the middle.

Americans might also, however, try to incorporate both equity and equality in their formulations. If this is the case we would observe the same general pattern seen in Study 1 in which, holding productivity constant, equal outcomes are thought to be fairer than unfavorable or favorable ones, but that within each of these three categories, the outcome that also maximizes equity would be regarded as particularly fair, a kind of "equity bonus." In either case, however,

H5: Scenarios in which higher productivity corresponds to a trade surplus, lower pro-

ductivity corresponds to a trade deficit, and equal productivity corresponds to a trade balance will be judged particularly fair. Scenarios in which higher productivity corresponds to a trade deficit or lower productivity corresponds to a trade surplus will be judged particularly unfair.

This expectation contrasts with the "endogeneity of fairness" argument, which predicts that respondents will judge fairness of agreements based on whether they benefit the United States, regardless of equity. In this instrumental perspective, the trade balance is all that matters.

H6: Favorable trade balances will be judged as the fairest, unfavorable trade balances as the least fair, regardless of productivity.

Finally, the "myopic fairness" argument would expect Americans to be concerned by genuine fairness when not in the domain of falling behind, but they will be particularly sensitive to trade deals that leave the United States relatively worse off, regardless of productivity. In other words, equity cannot compensate for the perceived unfairness of losses. Respondents should view unfavorable trade balances as the least fair and productivity should not be a significant factor in evaluating the fairness of unfavorable deals. When not in the realm of falling behind, equity concerns should matter, which means the balanced/equal and favorable/productive combinations should be viewed as particularly fair. The "equity bonus" will apply to favorable and balanced outcomes but not unfavorable ones, as would be the case in H5. In that we expect Americans do indeed care about fairness in terms of both equity and equality, they should be especially pleased with outcomes that entail both.

H7: Unfavorable trade balances will be regarded as the most unfair regardless of productivity. So long as the United States does not lose in relative terms, then trade deals will be viewed as particularly fair when productivity and outputs are in line. The equal productivity/balanced treatment will be regarded as the most fair.

We begin our analysis of the second study with an examination of the main effects of the balanced, favorable, and unfavorable trade flow treatments. This allows us to assess whether the public's perceptions of fairness are consistent across the two studies. Figure 6 displays the average fairness scores for each treatment, showing that trade agreements that result in balanced trade flows are viewed as significantly fairer than both favorable and unfavorable trade flows. The change in the fairness score for moving from the unfavorable treatment to the equal treatment is 0.43 ($p <$

0.00), which corresponds to 13 percent more respondents believing the agreement is fair ($p < 0.00$). Interestingly, perceptions of fairness are once again significantly higher when the trade flows are equally balanced, as opposed to favorable, with the fairness score being 0.14 higher in the equal treatment ($p < 0.00$) and seven percent more of the respondents believing the trade agreement is fair ($p < 0.00$). This is more evidence against the endogeneity of fairness argument. However, relatively favorable outcomes are regarded as more fair than relatively unfavorable ones, against the pure fairness argument. The results are perfectly aligned with those from the first study, further supporting the myopic fairness hypothesis.[14] Even as we shift the scenario from one about the distribution of concessions to the distribution of benefits, Americans use the same standard for judging fairness.

Figure 6: Perceived Fairness by Trade Flows
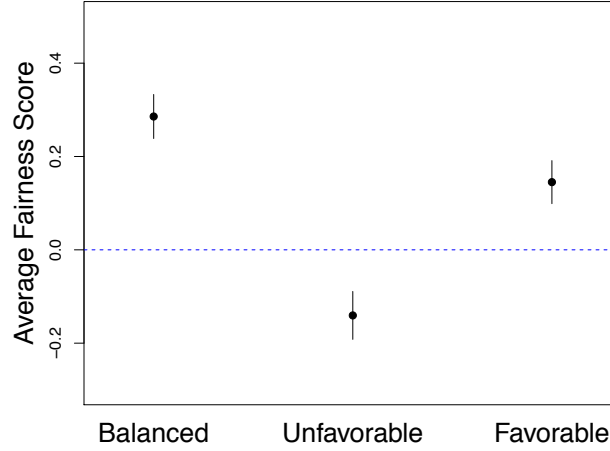
Note: Figure 6 displays the average fairness score by treatment type, measured from -2 to 2, with 95 percent confidence intervals. Higher values represent greater levels of fairness for the trade agreement.

We next analyze the results across all combinations of productivity and trade flow treatments, which allows us to test our equity hypotheses. The results are displayed in Figure 7, which again shows significant support for our myopic fairness argument. When considering the unfavorable balances – shown in the middle of Figure 7 – a lack of American productivity cannot compensate for the perceived unfairness of the relative loss, which goes against a pure fairness argument. Once respondents feel as though they are falling behind, they are no longer worried about equity and

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[14]The results for the dependent variable of supporting renegotiation are also consistent with the earlier results, and are discussed in the appendix, pages 9-10.

appear to only focus on their myopic concern of whether they are doing worse than others.

However, equity considerations are important in the favorable and balanced outcomes as our argument would expect. When we shift back to analyzing equity concerns in the favorable condition – shown in the right portion of Figure 7 – respondents viewed the equitable condition – where U.S. workers are more productive and there is a favorable trade flow – as fairer than the other the inequitable combinations (0.17 $p < 0.01$ and 0.12 $p < 0.09$). These results are consistent with the myopic fairness hypothesis and demonstrate that both concerns for equality and equity play a significant role in how the American public evaluates trade agreements. Equity matters but in an asymmetric way.

Nevertheless, by a significant margin, the outcome judged most fair is the one in which the trade flows are equally balanced and workers are equally productive. In this treatment, where inputs and outputs are commensurate, respondents judged it to be significantly fairer than the other two balanced treatments (0.28 $p < 0.00$ and 0.30 $p < 0.00$), but also the treatment when the United States is more productive and gains more, demonstrating the importance of equity when evaluating trade deals. Americans prefer outcomes that are both equal and equitable, those that maximize both conceptions of fairness.

4   Individual-Level Determinants of Myopia in Fairness Judgements

The main results show that, on average, the American public views international trade agreements through a myopic lens, such that the mass public believes it is unfair when the United States falls relatively behind in a trade deal, but they are otherwise concerned about equality and equity in trade agreements. If our argument is correct, we should also see evidence in the form of heterogeneous treatment effects. If the public demonstrates myopic fairness as a whole, then this should be more pronounced for those who have a narrower, national frame of reference and less pronounced for those who have a broader, global and internationalist one. In other words, we suspect that those who have higher levels of national attachment will be more myopic. Conducting such an individual-level analysis, while lacking the same strength in causal identification, adds to our confidence in the underlying theoretical mechanism.

To capture a broader, more global outlook we utilize the construct of "cooperative internation-

Figure 7: Fairness of Agreement by Equity and Equality
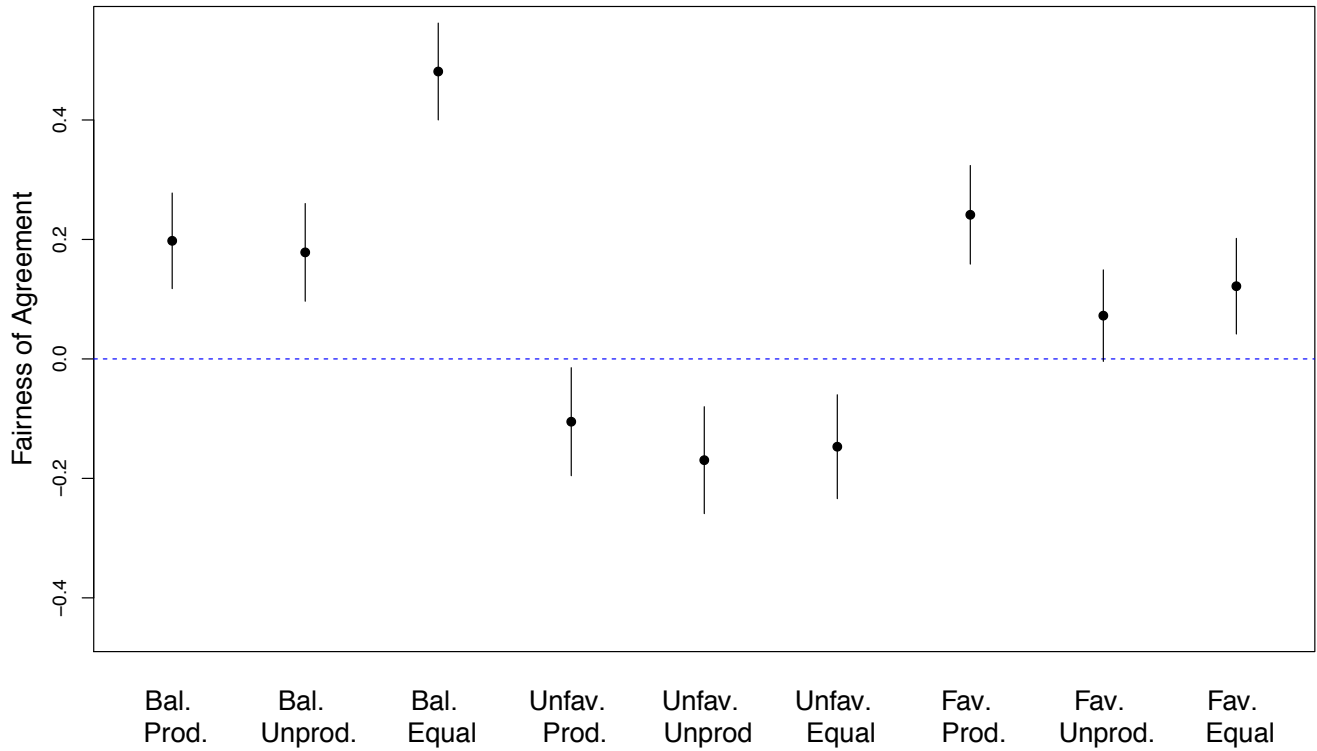
Note: Figure 7 displays the average fairness score by treatment type, measured from -2 to 2, with 95 percent confidence intervals. Higher values represent greater levels of fairness for the trade agreement.

alism," a commonly used index found to structure foreign policy attitudes systematically both in the American mass public and elites as well as in other countries (Kertzer et al., 2014; Rathbun, 2007; Wittkopf, 1990). Cooperative internationalists express more support for helping others in foreign affairs, whether it be in the form of promoting human rights or supporting development. They are also stronger supporters of mutually beneficial cooperation through international organizations. We expect that:

H8: Those higher in cooperative internationalism will demonstrate a relatively purer fairness logic in which they will consider the equal outcomes in both studies 1 and 2 considerably fairer than either of the asymmetric ones.

H9: Greater degrees of cooperative internationalism will lessen the gap between the perceived unfairness of favorable and unfavorable outcomes.

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We expect that those high in national attachment will demonstrate greater myopia.

H11: Those higher in national attachment will demonstrate less of a gap in their fairness assessments between equal and favorable outcomes.

H12: Those higher in national attachment will demonstrate a greater gap in their fairness assessments of favorable and unfavorable outcomes than those low in national attachment.

To test this, our study included a series of questions that measure cooperative internationalism (CI) and national attachment (NA), displayed in the appendix, page 8. We define those who score in the upper quartile for the respective measures as being "High CI" or "High NA" individuals and those in the bottom quartile as "Low CI" or "Low NA" individuals. For both CI and NA we use additive scales of the question responses to determine whether respondents are high or low on the scale.

Looking first at the effect of CI, Figure 8 shows the results from our first study in panel "a" and the results from our second study are displayed in panel "b". As expected high CI respondents rank equal outcomes as considerably fairer than favorable ones when compared to low CI respondents. They are also much less bothered by the unfairness of unfavorable outcomes, leading to a closing of the gap in fairness assessments between unfavorable and favorable outcomes, although the latter are still considered more just than the former. CI reduces but does not eliminate myopia.

National attachment, however, increases myopia to some degree. Those high in NA rate equal and favorable outcomes as closer in fairness than those low in NA. And the gap in fairness perception between unfavorable and favorable outcomes is higher for them as well. Overall, our expectations are strongly confirmed.

5   Conclusion

Our results show that fairness matters for how the mass public in the United States thinks about trade. First, we find that Americans value equality in international trade and they prefer balanced trade agreements in which the distribution of concessions or trade flows is equal. Not only does the public view such agreements as being fairer than favorable and unfavorable agreements, but this concern for fairness leads to increased support for balanced trade agreements. Second, we

Figure 8: Effect of Cooperative Internationalism

(a) Study 1: Trade Concessions

(b) Study 2: Trade Balance
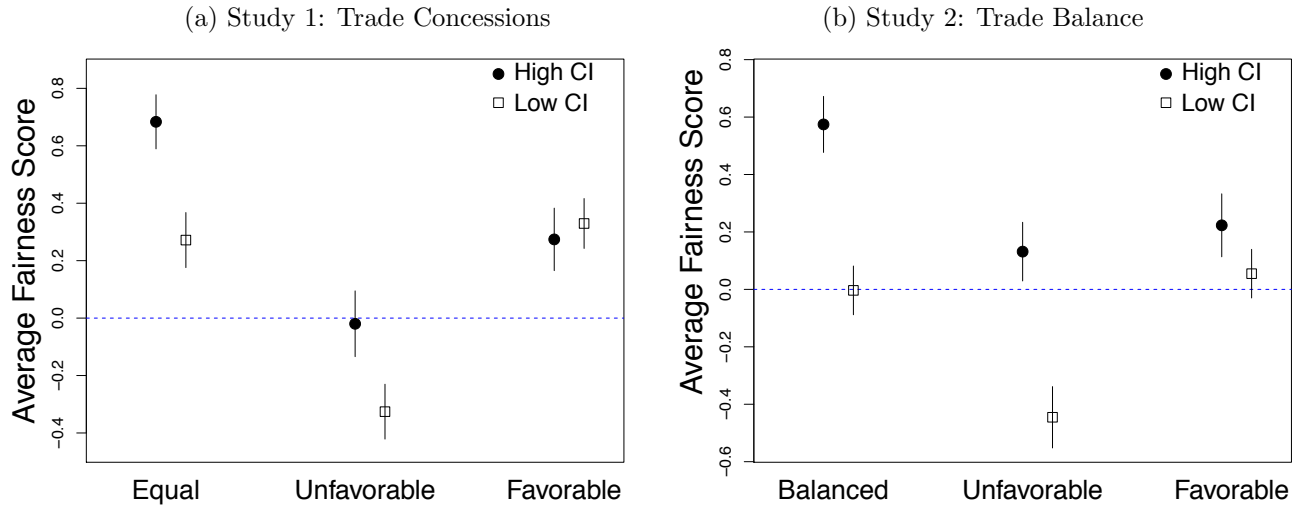
Note: Figure 8 displays the average fairness score by treatment type, measured from -2 to 2, with 95 percent confidence intervals for those qho score in the top and bottom quartile on the CI scale. Higher values represent greater levels of fairness for the trade agreement.

Figure 9: Effect of National Attachment

(a) Study 1: Trade Concessions

(b) Study 2: Trade Balance
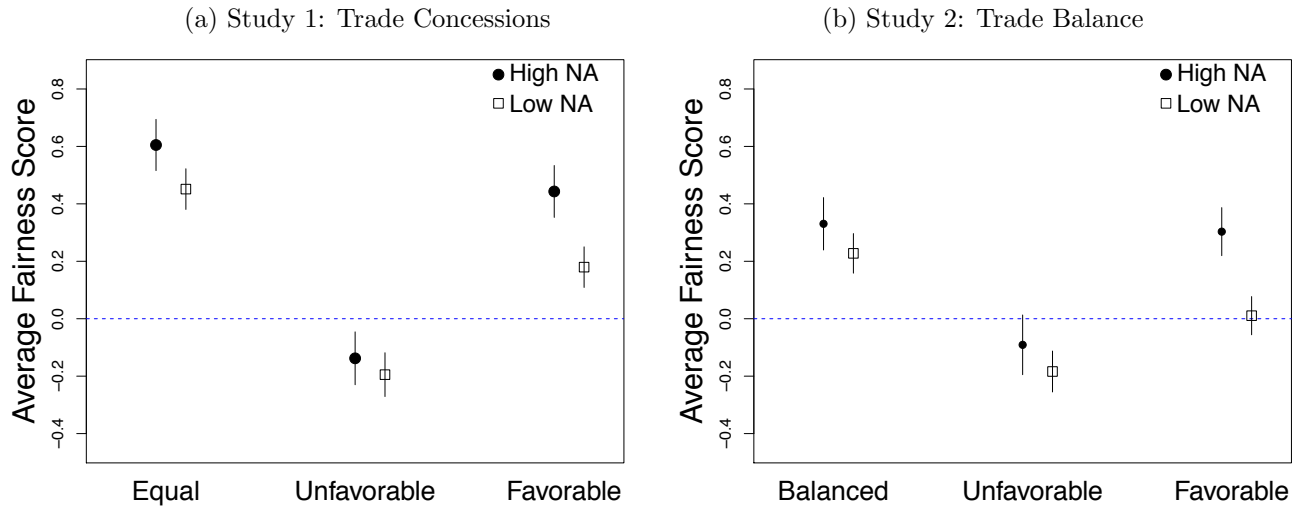
Note: Figure 9 displays the average fairness score by treatment type, measured from -2 to 2, with 95 percent confidence intervals for those qho score in the top and bottom quartile on the CI scale. Higher values represent greater levels of fairness for the trade agreement.

show that the public is also concerned about equity in trade, and that they believe trade deals where there is equivalence between inputs and outputs are fairer. These findings help explain why American presidents have repeatedly invoked concerns for fairness when making the case for their trade policies.

Importantly, fairness judgments do not simply follow the flag, but they are not entirely objective either. Americans judge balanced trade deals as more fair than favorable ones, and they even support many balanced trade outcomes as much or more than those in which the United States comes out ahead both in relative or absolute terms. Americans are, however, relatively myopic, more inclined to see injustices done to them than to others. They consistently rate unfavorable trade deals as the least fair, even if workers in the United States are not as productive as the country doing better, and they have lower levels of support for these trade deals. Nevertheless, they significantly prefer trade agreements in which each side gains equally, especially when the outputs are commensurate with inputs. In this sense, we can say that they are truly committed to everyone getting a fair share.

We also find convergent evidence for our myopic fairness argument when adding individual-level variables capturing variation in identification. We hypothesize and find evidence that national attachment increases the asymmetry in fairness judgments; those who are strong identifiers with the United States rate favorable terms as fairer than those that identify less strongly. Cooperative internationalism, in contrast, creates fairness judgments more in line with a pure fairness calculus: a stronger preference for equal outcomes and less support for favorable outcomes. Those with a more global perspective demonstrate less myopia.

Our results show that Americans in general prefer trade outcomes that keep up with the Jones'. They do not begrudge gains to other countries in trade so long as other countries do not gain more than the United States, which they perceive as unfair. This is different than the traditional way in which international relations scholars handle relative distributions in state interactions, generally fixated on whether states pursue relative gains. As a whole it does not appear that the American public prefers relative or absolute gains, but they are very concerned about relative losses. A focus on fairness, lacking in previous scholarship, brings this story into light.

Our results are also empirically consistent with Gottfried and Trager (2016), who find that in a hypothetical dispute with Russia, Americans greatly dislike a split of territory that leaves the United States relatively behind. They are slightly more supportive of an equal split over one that favors the United States, showing that fairness matters. However, the decline in support for a favorable

outcome when compared to an equal one is considerably less than the decline when an unfavorable outcome is compared to an equal one. Our myopic fairness argument, grounded in social comparison and the relative deprivation literatures, offers an explanation for this pattern.

These findings have important implications for how the public forms opinions about trade. The myopic nature of how Americans view fairness in trade suggests that when Trump focuses only on trade in goods and claims the United States has a trade deficit with Canada (Trump, Donald J. (realDonaldTrump), 2018c), the public is likely to view this as unfair and want to renegotiate existing trade agreements. In contrast, if the public learns that the United States has a trade surplus in goods and services with Canada (USTR, 2018), they would view this as much fairer and have higher support for maintaining our existing trade agreements. Our findings highlight the importance of what data are used when trade flows are discussed by politicians or the media and how the public interprets these facts.

Our results also add further support to a growing body of literature that argues attitudes toward trade are not just about economic interest (Ehrlich, 2010, 2018; Margalit, 2012; Mutz and Kim, 2017). Although our studies show that Americans exhibit significant concern for falling behind in trade agreements, they are also willing to forgo both relative and absolute gains in favor of trade deals that they believe are fairer. The importance of fairness in shaping attitudes toward trade helps explain why politicians repeatedly and loudly use fairness as the rallying cry for trade policies. Although Americans show a strong willingness to support equal trade agreements, they also react strongly in opposition of unfavorable trade deals that they believe are unfair. This effect highlights the power of Trump's rhetoric about American industries being "decimated by decades of unfair trade [...] We want free, fair and SMART TRADE!" (Trump, Donald J. (realDonaldTrump), 2018b) and why Trump was able to capitalize on the public's fears of falling behind during his election campaign where he emphasized the need to "combat unfair trade" (Trump, Donald J. (realDonaldTrump), 2018a).

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SUPPLEMENTARY APPENDIX TO:

FAIR PLAY?: EQUITY AND EQUALITY IN AMERICAN
ATTITUDES TOWARDS TRADE

Contents

1 Appendix

1.1 Sample Demographics and Balance

Table 1: Study 1 Demographics

	Percent of Sample
Age18 - 29	0.18
Age 30 - 44	0.25
Age 45 - 59	0.28
Age 60+	0.29
Women	0.55
Income $0 - $50,000	0.47
Income $50,001 - $100,000	0.33
Income $100,001 - $150,000	0.12
Income $150,00+	0.07
Democrat	0.35
Republican	0.28
Independent	0.28

Table 2: Study 2 Demographics

	Percent of Sample
Age18 - 29	0.17
Age 30 - 44	0.31
Age 45 - 59	0.36
Age 60+	0.16
Women	0.59
Income $0 - $50,000	0.47
Income $50,001 - $100,000	0.35
Income $100,001 - $150,000	0.11
Income $150,00+	0.07
Democrat	0.35
Republican	0.27
Independent	0.29

Balance Tests: The following three tables present the results of balance tests that evaluate whether treatment assignment was correlated with key demographic characteristics. For each study, we regress each treatment condition on our key demographic variables and find that treatment assignment is not correlated with population demographics. This gives us confidence that our random assignment achieved a well balanced study across treatment conditions.

Table 3: Study 1: Balance Test For Trade ConcessionsTreatments

	Study 1: Trade Concession Treatments		
	Equal	Favorable	Unfavorable
Age	−0.0003	−0.0001	0.0004
	(0.001)	(0.001)	(0.001)
Education	−0.007	0.004	0.003
	(0.009)	(0.009)	(0.009)
Income	0.002	0.004	−0.006
	(0.005)	(0.005)	(0.005)
Women	0.006	0.009	−0.015
	(0.018)	(0.018)	(0.018)
Constant	0.355***	0.310***	0.335***
	(0.036)	(0.035)	(0.036)
Observations	3,040	3,040	3,040
Note:		*p<0.1; **p<0.05; ***p<0.01	

Table 4: Study 2: Balance Test for Trade Balance Treatments

	Study 2: Trade Balance Treatments		
	Balanced	Favorable	Unfavorable
Age	0.001	−0.001	0.00005
	(0.001)	(0.001)	(0.001)
Education	0.003	−0.007	0.005
	(0.009)	(0.009)	(0.009)
Income	−0.001	0.001	−0.0003
	(0.005)	(0.005)	(0.005)
Women	0.043**	−0.020	−0.024
	(0.017)	(0.017)	(0.017)
Constant	0.268***	0.394***	0.338***
	(0.038)	(0.038)	(0.038)
Observations	3,187	3,187	3,187
Note:		*p<0.1; **p<0.05; ***p<0.01	

Table 5: Study 2: Balance Test for Productivity Treatments

	Study 2: Productivity Treatments		
	Equal	Productive	Unproductive
Age	−0.0003	0.0002	0.00004
	(0.001)	(0.001)	(0.001)
Education	0.007	−0.009	0.002
	(0.009)	(0.009)	(0.009)
Income	−0.004	0.00003	0.004
	(0.005)	(0.005)	(0.005)
Women	−0.004	−0.013	0.017
	(0.017)	(0.017)	(0.017)
Constant	0.342***	0.354***	0.304***
	(0.038)	(0.038)	(0.038)
Observations	3,187	3,187	3,187

Note: *p<0.1; **p<0.05; ***p<0.01

1.2 Study 2 - Instrument

The United States is part of a free trade agreement in which the United States and the other country reduced its tariffs – that is, the tax charged on foreign goods and services when they cross borders. The agreement has led to a [2 to 1 trade imbalance favoring the United States in which the United States exports twice as much as it imports from the other country <u>or</u> 2 to 1 trade imbalance favoring the other country in which the other country exports twice as much as it imports from the United States <u>or</u> relative balance in trade between the two countries in which each side imports about as much as it exports from the other country]. [Studies show that American workers are twice as productive as the workers in the other country <u>or</u> Studies show that workers in the other country are twice as productive as workers in the United States <u>or</u> Studies show that workers in both countries are about equally productive].

1.3 Interpreting the Productivity Treatment

A key question for the second study is how respondents interpreted the productivity treatment. When considering fairness as equity, respondents should be thinking of inputs relative to outputs. In this manner, when the treatment condition specified that foreign workers are more productive, this should trigger respondents to think that they are putting more into the "inputs" and thus it would be more equitable for foreign workers to receive more of the outputs.

To evaluate whether respondents interpreted the productivity treatment in a manner consistent with our theory of equity, we evaluated the free responses that respondents provided. Each respondent was asked "While you were thinking about the previous question about the trade agreement, what first came to mind? Please take a minute to describe your thoughts." A review of the free responses demonstrates that respondents typically interpreted productivity to mean how hard the workers worked, which is consistent with our theoretical quantity of interest – how equity affects attitudes toward trade. Indeed, some respondents explicitly invoked concerns for equity in their evaluation, noting "If the other country works twice as hard and sends twice as many goods, they deserve more..." and "Why are Americans working harder and not reaping the bottom line reward?" Additional examples illustrating how the productivity treatment was interpreted are as follows:

Examples of free responses in the "workers in the other country are twice as productive as workers in the United States" treatment:

- If the other country works twice as hard and sends twice as many goods, they deserve more incentives.

- That the reason jobs are going overseas is because of them working more harder than us.

- ... workers in the other country work twice as hard as the ones in the US

- People are more productive in other countries because they have to work twice as hard...

- I can see other countries working harder and benefiting more so.

- About how the other Country's workers work harder than USA

- That foreign workers are judged to be working twice as hard as American workers

- Americans are lazy demanding, and egotistical. They have no idea of reality and how tough other countries have it, how hard they work for what they have...

- Workers in other countries work twice as hard as Americans

4

Examples of free responses in in the "American workers are twice as productive as workers in the other country" treatment:

- I was thinking how unfair it is for Americans to be working harder than the workers in the other country yet the other country were benefiting more.

- Why are Americans working harder and not reaping the bottom line reward?

- Proud that Americans are the harder workers.

- that americans work the hardest

- Americans works twice as harder as others in other countries

- If American workers are working twice as hard for the same return...why?

- It made me proud to realize how hard Americans work.

While the free responses provide substantial evidence that our respondents interpreted the productivity treatment in a manner consistent with a theory of equity, we also conducted a further test to evaluate whether equity perceptions based on productivity were relatively important when shaping attitudes toward trade. In the additional study, fielded on a large sample of Americans recruited by SSI, we described a trade agreement that "led to American job losses in the manufacturing sector due to increased competition", and then asked them to evaluate how fair the agreement was. In the control condition no additional information was provided. In the treatment conditions we randomly included additional information that said firms in the foreign country were more productive because they had [lower costs of living, fewer health and safety regulations, an abundance of unskilled labor, lower wages, or that workers work harder]. Our results found that the productivity treatment – workers tend to work harder – had the greatest effect on perceptions of fairness. Although the agreement led to American job losses, when foreign workers were more productive, the agreement was deemed to be fairer ($p < 0.03$) and the productivity treatment had the greatest effect on attitudes toward trade.[1] This gives us greater confidence that thinking of equity in terms of productivity, specifically how hard workers work, is central to the equity concerns captured in our study.

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[1]The producitivty treatment had the greatest effect on perceptions of fairness.

1.4   Mediation Analysis and Results

The mediation analysis presented in this paper is implemented using the R package by Imai et al. (2010), which uses a potential outcome framework to evaluate how much of the effect of the treatment travels through the mediator of interest. Under a given set of assumptions, this allows us to measure the average causal mediation effect (ACME), the average direct effect (ADE), and the total effect of the treatment. The results of the mediation analysis, displayed in Figure 5 of the paper, demonstrate that a large portion of the treatment effect on support for the trade agreement flows through the mediator of perceived fairness and that the results are robust to sensitivity analysis that tests the sequential ignorability assumption, as shown in Figure 1.

Because the mediation analysis relies on a sequential ignorability assumption, which may be violated by unobserved variables that affect both the mediator and the outcome, we conduct sensitivity tests to determine the robustness of our mediation results to violations of this assumption. This is an important step in analyzing the mediation results, since the sequential ignorability assumption cannot be tested with observed data (Tingley et al., 2014). The results of the sensitivity tests are displayed in Figure 1, which plots the the average causal mediation effect for each of our mediation tests against changes in ρ, which is potential levels of correlation between the error terms of the mediator and the outcome models. The plots illustrate that the ACMEs are robust to significant changes in ρ, giving us greater confidence in the mediation analysis.

Figure 1: Sensitivity Tests of Mediation Analysis

(a) Equal vs. Favorable

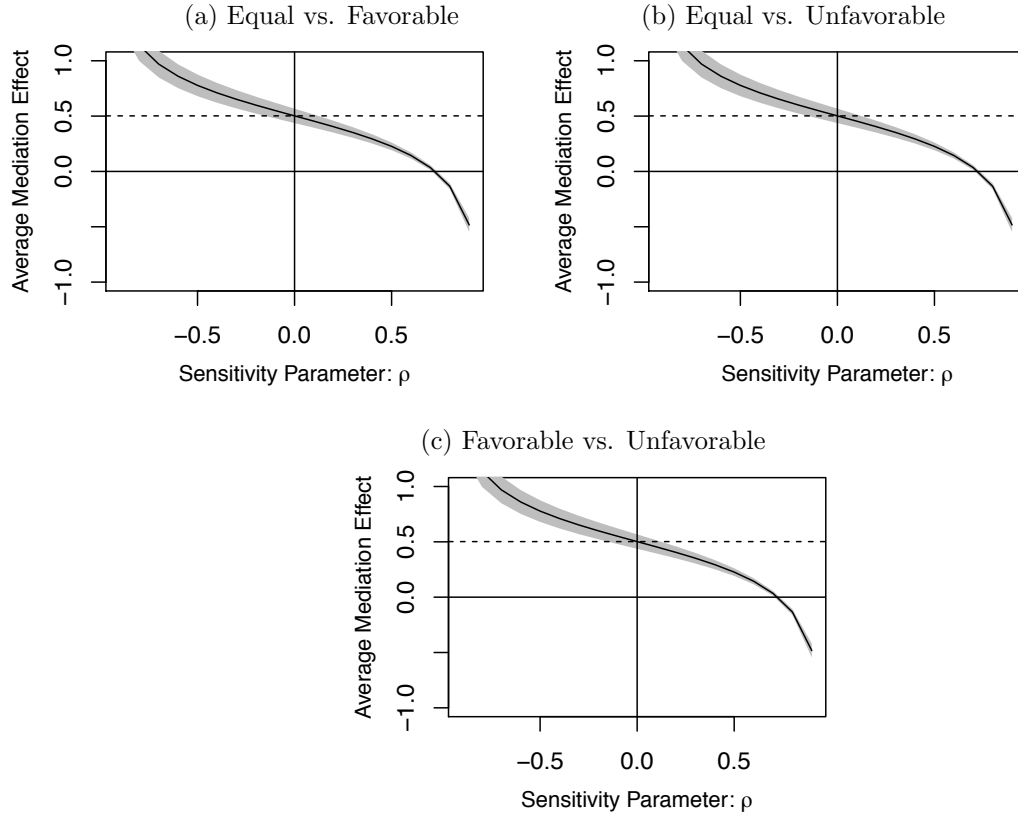(b) Equal vs. Unfavorable

(c) Favorable vs. Unfavorable

Figure 1 plots the Average Causal Mediation Effects (ACME) against changes in values of ρ to test the robustness of the results to violations of the sequential ignorability assumption. Analysis conducted using the `mediation` package by Imai et al. (2010).

1.5   Measures of Cooperative Internationalism and National Attachment

The CI questions asked respondents to "select the response that describes how you feel about the statement" with responses ranging from "Strongly Agree" to "Strongly Disagree" on a five-point scale, for the following statements:

The United States needs to cooperate more with the United Nations.

I consider myself a citizen of the world.

It is essential for the United States to work with other nations to solve problems such as overpopulation, hunger and pollution.

Promoting and defending human rights in other countries is of utmost importance.

Helping to improve the standard of living in less developed country is of utmost importance.

Protecting the global environment is of utmost importance.

The national attachment questions were:

When someone says something bad about American people, how strongly do you feel it is as if they said something bad about you? [Select from: "Extremely strongly" to "Not strongly at all" on a five-point scale]

How much do you feel that what happens to America in general will be your fate? [Select from: "A tremendous amount" to "Not at all" on a five-point scale]

1.6 Study 2: Support for Renegotiating

We also examine support for renegotiating the agreement across the three trade-flow treatments, with the results displayed in Figure 2. Importantly, this dependent variable is different than the support question asked in the first study, and thus increased support for *renegotiating* the agreement is interpreted as being analogous to being unsupportive of the trade deal. These results show that support for renegotiating the agreement is similar when trade flows are balanced or favorable, but support for renegotiating the agreement is significantly higher when the balance of trade is unfavorable. We find that the percent of people who support renegotiating the agreement is statistically indistinguishable between the balanced and favorable trade flow treatments (3 percentage point difference, $p < 0.21$). The percent of respondents who support renegotiating the agreement rises from 47 percent in the equal treatment to 53 percent in the unfavorable treatment ($p < 0.01$), and we find a similar treatment effect on the support score for renegotiating, which rises by 0.10 ($p < 0.02$). Also consistent with the first study, we find a large increase in support for renegotiating when shifting from the favorable treatment to the unfavorable treatment, with the percent of respondents supporting renegotiation rising by eight percent ($p < 0.00$) and the support score rising by 0.16 ($p < 0.00$). These results demonstrate once again that respondents appear quite concerned with falling behind, but are otherwise supportive of equally balanced deals and view such deals as fairer, once again highlighting that attitudes toward trade agreements are not just about maximizing relative tariff concessions or the trade balance.

Figure 2: Support for Renegotiating Agreement by Trade Flows
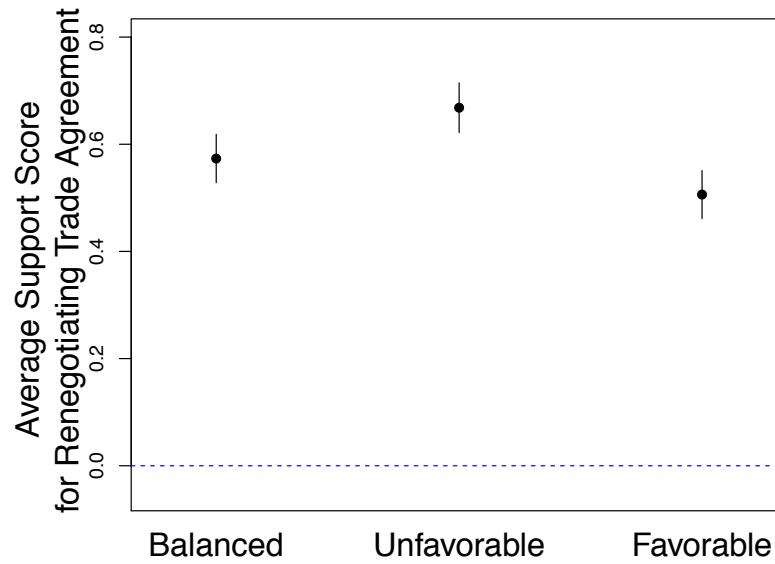
Note: Figure 2 displays the average support score for renegotiating the agreement by treatment type, measured from -2 to 2, with 95 percent confidence intervals. Higher values represent a greater desire to renegotiate the agreement.

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