



Public responses to foreign protectionism: Evidence from the US-China trade war

David A. Steinberg¹  · Yeling Tan²

Accepted: 12 May 2022 / Published online: 8 June 2022

© The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2022

Abstract

America's recent turn towards protectionism has raised concerns over the future viability of the liberal international trading system. This study examines how and why public attitudes towards international trade change when one's country is targeted by protectionist measures from abroad. To address this question, we fielded three original survey experiments in the country most affected by US protectionism: China. First, we find consistent evidence that US protectionism reduces support for trade among Chinese citizens. We replicate this finding in parallel experiments on technology cooperation, and provide further external validation with a survey experiment in Argentina. Second, we show that responses to US protectionism reflect both a "direct reciprocity" logic, whereby citizens want to retaliate against the US specifically, as well as a "generalized reciprocity" logic that reduces support for trade on a broader, systemic, basis.

Keywords International trade · International political economy · China · Public opinion

Responsible editor: Axel Dreher

Author contribution statement Author contributions to research design and conceptualization: D.S. (50%), Y.T. (50%); statistical analysis: D.S. (50%), Y.T. (50%); writing: D.S. (50%), Y.T. (50%). The order of the authors is chosen alphabetically.

✉ David A. Steinberg
dsteinberg@jhu.edu

Yeling Tan
yelingt@uoregon.edu

¹ School of Advanced International Studies, Johns Hopkins University, 1740 Massachusetts Avenue NW, Washington, DC 20036, USA

² Department of Political Science, University of Oregon, 1284 University of Oregon, Eugene, OR 97403-1284, USA

1 Introduction

In recent years, several of the world's largest economies have adopted more protectionist trade policies. Nowhere is this trend more visible than in the world's most important trading relationship—that between the US and China. US trade policy has grown substantially more protectionist since 2018, leading to a “trade war” with China and international frictions with other major economies. This protectionist turn appears likely to endure: not only has the Biden administration continued to levy tariffs on China (Hayashi, 2021), it has considered imposing new restrictions (Stevastopulo, 2021). Nor has US protectionism been limited to China. For example, one of the Biden administration's first major trade policy actions involved an increase in tariffs on imports from the United Arab Emirates (Palmer, 2021). Many observers worry that US protectionism could have broader repercussions—inflaming nationalist sentiments, undermining popular support for free trade in target countries, and ultimately weakening the foundations of the international trading system (Blustein, 2019, Ch. 10; Bown & Irwin, 2019; Niblett, 2017). To this end, this paper examines how foreign protectionism affects public support for trade in target countries.

We argue that public opinion on free trade is affected not just by domestic factors such as education and gender, but also by the actions of foreign countries. Our central hypothesis is that protectionism from abroad reduces public enthusiasm for free trade in target countries. We argue that this decline in public support for trade reflects individuals' preferences for two distinct types of reciprocity. Existing research on public attitudes towards international politics highlights the importance of *direct reciprocity*, which refers to declining support for cooperation with countries that do not cooperate (Brutger & Rathbun, 2021; Chilton et al., 2020; Chu, 2019; Tingley & Tomz, 2014). Along these lines, we expect the public to want to retaliate by raising tariffs on imports from the protectionist country.

We argue that individuals also care about a second form of reciprocity, known as *generalized reciprocity*. Prior studies from social psychology and behavioral economics find consistent evidence of generalized reciprocity: individuals that are treated poorly by one actor do not just reduce their cooperation with the offending actor—they become less cooperative in all of their social interactions, regardless of who they are interacting with (Berkowitz & Daniels, 1964; Dufwenberg et al., 2001; Fowler & Christakis, 2010; Gray et al., 2014; Greiner & Levati, 2005; Simpson et al., 2018; Stanca, 2009; Whitham, 2021; Zitek et al., 2010). We argue that generalized reciprocity also shapes public opinion towards international trade. Generalized reciprocity implies that the impact of foreign protectionism will not be contained within the dyadic relationship between protectionist and target country. Rather, protectionist actions by one country are likely to also reduce the public's support for free trade writ large.

This article tests this argument using three survey experiments fielded in China between 2019 and 2021. To examine the impact of foreign protectionism on public support for trade in target countries, we focus on how citizens in China have

responded to the adoption of protectionist trade policies by the United States since 2018. We focus on Chinese public reactions to US trade protectionism for several reasons. First, the US-China trading relationship is highly consequential, with bilateral trading volumes between the world's two largest economies amounting to over US\$600 billion in 2017.¹ Second, while the US government has enacted protectionist measures against a number of countries, its most concerted actions have been targeted at China. Third, China's policy response to the trade war seems to be at least partially influenced by public attitudes on this issue. Research has highlighted the Chinese government's responsiveness to public sentiments (Chen et al., 2016; Distelhorst & Hou, 2017), including in the realm of foreign policy (Weiss, 2014; Zhao, 2013). China's top leaders themselves emphasize the importance of public opinion: for example, Chinese President Xi Jinping has asserted that "winning or losing public support is an issue that concerns the CPC's survival or extinction" (quoted in Weiss & Dafoe, 2019, 963). In fact, China's central government sought public input in 2018 on how it should respond to Trump's tariff threats (Ministry of Commerce, 2018). China's leadership subsequently justified its decision to retaliate with tariffs by noting that "it had Chinese public opinion on its side" (Buckley, 2018). Given China's dominant role in international trade, Chinese public opinion on trade policy is therefore of real world significance, potentially having a consequential impact on the global economy. Yet we know little about the determinants of trade preferences among the Chinese public.

Our survey experiments randomly assign some subjects to be reminded about US protectionism. We find robust evidence that priming respondents about US protectionism substantially reduces support for free trade. This finding is consistent across the three main experiments fielded at very different time periods and contexts. We also provide three forms of external validation for this main finding. First, we show that average support for free trade fell precipitously between the first two surveys, a period during which the US ramped up protectionism against China. This increase in protectionist sentiment is highly suggestive that our experimental primes and real-world policy changes have consistent effects on citizen attitudes. Next, we replicate the main finding in two survey experiments about attitudes towards high-tech innovation policy, an emerging source of inter-state economic tensions. Third, we ran a similar survey experiment in Argentina shortly after the US raised tariffs on Argentine goods, and once again find that primes about foreign protectionism lower support for open trade.

We then more directly test our argument that the fall in support for trade reflects a combination of direct reciprocity and generalized reciprocity. Consistent with existing work, our evidence indicates that direct reciprocity is important. Priming individuals about US protectionism increases the desired level of trade barriers vis-à-vis the US specifically. This desire to retaliate against the US contributes to the overall rise in protectionist sentiment. However, concerns about direct reciprocity cannot fully account for the fall in support for free trade. Our estimates suggest that direct reciprocity explains only a small part of the overall link

¹ Data from the World Integrated Trade Solution at <https://wits.worldbank.org/>.

between US protectionism and trade attitudes. Therefore, the impact of US protectionism is not confined to the US-China bilateral relationship, but appears to reduce the public's overall support for free trade. This provides suggestive evidence that opinions about international trade are also shaped by the logic of generalized reciprocity.

Our findings make several contributions to scholarship on international relations and political economy. This study brings new data to bear on what the public thinks about international trade in the world's largest exporting nation—a country that has been largely neglected in previous scholarship on trade attitudes.² Our research also provides new theoretical insights about the impact of international-level factors on domestic public opinion. Prior research finds that the attributes and policies of foreign countries influences whether individuals want to trade with those specific countries (Brutger & Rathbun, 2021; Bush & Prather, 2020; Carnegie & Gaikwad, 2022; DiGiuseppe & Kleinberg, 2019; Spilker et al., 2016). Reinforcing these previous results, we find that information about US protectionism reduces support for trade with the US specifically, reflecting a direct reciprocity logic. However, consistent with theories of generalized reciprocity, we also find that foreign protectionism reduces support for free trade on a global basis. The actions of one country can have more broad-based effects on public opinion than is often recognized. While there has been some recognition that generalized reciprocity influences state-level interactions in the trade arena (Keohane, 1986), future research should pay more attention to the micro-foundations of generalized reciprocity.

Our findings also have worrying implications for those concerned about the future of the open trading system. They suggest that recent US protectionist actions have not just triggered a loss of support for trade with the US among important trade partner-countries; it has also weakened public support for economic openness in general. These shifts in public opinion are likely to make it harder for foreign governments to maintain free-trade policies, potentially undermining the sustainability of the liberal international economic order.

2 The impact of foreign protectionism on public support for open trade

We argue that protectionism from abroad (or what we call foreign protectionism) reduces public support for free trade in target countries. Drawing on theories of reciprocity, we contend that two distinct aspects of reciprocity contribute to the rise in protectionist sentiment.

² Most previous research on trade attitudes is centered on advanced industrialized democracies (see Kuo and Naoi 2015 for a review of this literature). One subset of this literature examines public opinion towards trade with China (Jin et al. 2022; Landriault and Minard 2018; Yeung and Quek 2022), and another subset examines how rising trade with China influences voting behavior (Autor et al., 2020; Colantone and Stanig 2018). A small number of works focus on Chinese public opinion on issues closely related to trade: Lu and Tian (2008) study attitudes towards “economic internationalism” (of which trade is one component); Nguyen et al. (2020) explore Chinese attitudes towards trade agreements; and Shi and Zhu (2019) examine public support for China's response to the trade war with the US. Our outcome of interest, Chinese individuals' general trade attitudes, is distinct from these prior studies.

First, and perhaps most intuitively, is the logic of “direct reciprocity.” Direct reciprocity refers to behavior within a bilateral relationship. If an actor follows a strategy of direct reciprocity, she cooperates with actors that previously cooperated and punishes actors that were uncooperative in their prior interaction. The logic of direct reciprocity implies that citizens in the targeted country will want to retaliate against (cooperate with) the protectionist country by raising (lowering) tariffs against that country specifically. This form of reciprocity is widely believed to foster cooperation among nations in an otherwise anarchic world (e.g., Axelrod, 1984; Bagwell & Staiger, 2004; Keohane, 1986; Rhodes, 1989). There is also a growing body of evidence showing that public opinion on international relations reflects this logic. Individuals are more opposed to trade agreements when their own country reduces tariffs more than other member-countries (Brutger & Rathbun, 2021). Chilton et al. (2020) show that individuals are more supportive of inward foreign direct investment from countries that are themselves open to investment from the respondent’s country. The American public is also more supportive of treating prisoners of war humanely when adversaries treat captured American prisoners well (Chu, 2019). Following the same logic, the mass public also supports punishing countries that violate their environmental-treaty commitments (Tingley & Tomz, 2014).

We expect that public responses to foreign protectionism are partly shaped by concerns about direct reciprocity. This logic implies that foreign protectionism will increase the desire of citizens in target countries to raise trade barriers against the protectionist country. There are several reasons why such a reaction is likely. Individuals might support protectionist retaliation as a means to demonstrate that economic aggression will not succeed against their country and to strengthen their country’s bargaining position (Drezner, 2019). They may also simply see a reciprocal tariff increase as the fairest and most morally just way to respond to another country’s tariff hike (Brutger & Rathbun, 2021). Additionally, if the imposition of trade barriers is interpreted as a hostile action against the nation, individuals may believe that it necessitates an intransigent response so as to defend the status of one’s own nation (e.g., Gruffydd-Jones, 2019). Other things being equal, a desire to reduce trade with this specific country implies lower support for trade overall, particularly when the protectionist country is a large trading partner. Hence, this direct reciprocity logic is one reason to expect higher tariffs in a foreign country to increase support for trade barriers in targeted countries.

Public attitudes on trade should also reflect a second type of reciprocity that has received relatively less attention in the field of International Relations: “generalized reciprocity.” Generalized reciprocity exists when one agent’s behavior toward a second agent affects the latter’s willingness to cooperate with all actors.³ In other words, whereas direct reciprocity implies that Player A’s actions towards Player B influence B’s actions towards A, generalized reciprocity implies that A’s behavior

³ Keohane’s (1986) discussion of the importance of reciprocity for sustaining inter-state cooperation in international politics recognizes the importance of this form of reciprocity, though he uses the label “diffuse reciprocity,” contrasting this with “specific reciprocity.” We build on these earlier concepts to test the two reciprocity logics at the individual level and through survey experiments. We use the terms “generalized” and “direct” reciprocity because these are the most commonly used labels in the more recent literature on reciprocity.

towards B will influence B's behavior beyond their interactions with A. Laboratory-based experiments consistently show that cooperative and un-cooperative behavior spreads in this manner: subjects that are on the receiving end of a cooperative or generous (uncooperative or ungenerous) act in one interaction are more likely to behave in a cooperative or generous (uncooperative or ungenerous) manner towards unconnected third parties (Berkowitz & Daniels, 1964; Dufwenberg et al., 2001; Fowler & Christakis, 2010; Gray et al., 2014; Greiner & Levati, 2005; Simpson et al., 2018; Stanca, 2009; Whitham, 2021; Zitek et al., 2010).

Given the extensive evidence that indicates the importance of generalized reciprocity, we expect foreign protectionism to reduce not only support for *bilateral* trade, but to also lower the desire to engage in trade at the *systemic* level. In other words, when one foreign country imposes trade barriers, citizens in the target country are likely to reduce their support for free trade on a general basis. There are several reasons to expect such a response. First, existing studies suggest that mistreatment by one actor creates a negative emotional response, which leads them to act more selfishly and less cooperatively in general (Berkowitz & Daniels, 1964; Gray et al., 2014; Simpson et al., 2018; Zitek et al., 2010). In the context of trade policy, a foreign country's trade barriers may generate feelings of resentment, causing individuals to feel that their country should also be entitled to raise import barriers themselves. Second, when individuals learn that one foreign country is protectionist, they may change their views about the strength of the global norm surrounding free trade (Stanca, 2009, 192; Whitham, 2021). If someone believes that norms of cooperation and free trade are widely ignored, they are likely to conclude that their country should not abide by these conventions either (Goldstein, 1998). Third, foreign protectionism may increase the perceived economic and political costs that accompany a strategy of open trade. The adoption of protectionism by a foreign state is likely to cause "citizens to recognize in a much more serious way how economic interdependence left them vulnerable to international markets and the actions of foreign governments" (Helleiner, 2021, 19). For these reasons, protectionism in foreign countries is likely to increase support for trade barriers on both a bilateral and a global basis.

We see evidence of both reciprocity logics among policymaking elites in China and elsewhere. China's response to US tariffs on Chinese goods followed the dictates of direct reciprocity. There was a consensus among Chinese elites—both moderates and hardliners alike—that China should raise barriers against US imports in response to the US doing so against China (Li, 2019, 539–540). Beyond China's direct retaliation, US protectionism also prompted a deeper reconsideration of the country's overall trade strategy, reflective of a generalized reciprocity logic. Chinese President Xi Jinping has himself elaborated on this rationale for a more general turn away from open-trade policies, arguing that "[u]nilateralism and trade protectionism are rising, forcing us to adopt a self-reliant approach" (Wang & Xin, 2018). India was also hit with new restrictions on its exports to the US in 2018–19. Much like China, part of India's official response involved retaliatory tariffs on US goods (BBC, 2019). Indian Prime Minister Narendra Modi also concluded that US protectionism necessitated a broader reorientation of trade policy, asserting in a speech in May 2019 that the "state of the world today teaches us that 'Self-reliant India' is the

only path” (quoted in Helleiner, 2021, 19). We anticipate that ordinary citizens will respond to foreign protectionism in a similar manner as policymaking elites, favoring higher trade barriers on both a bilateral and systemic basis.

Based on this discussion, our main hypothesis is that foreign protectionism increases support for protectionism among target-country publics. This turn towards protectionism is motivated by both direct and generalized reciprocity: foreign protectionism affects bilateral trade sentiments by triggering the desire to retaliate against the protectionist country, and also lowers support for trade at the systemic level. While there are strong grounds to expect public support for free trade to decline, the degree to which foreign protectionism reduces free-trade sentiment is likely to depend on certain contextual features. For example, as mentioned earlier, responses to protectionism are also likely to be strongest when the protectionist country is a major trading partner. The nature of the protectionist policies themselves might also be relevant. For instance, unilateral protection might have a larger effect on public opinion in target countries than protectionism that occurs within the context of multilateral trade institutions such as the WTO. Similarly, citizens might respond more strongly when tariffs are clearly targeted at one’s own country compared to tariffs that are applied against numerous countries in a less discriminatory manner.⁴

3 Research design

We use survey experiments to explore whether and how foreign states’ policies influence individual attitudes about international trade policy in target countries, using the US’ levying of protectionism against China in 2018–21 as a critical case. The experiments varied the amount and type of information that subjects received about US trade policy (among other factors). This design allows us to assess whether priming citizens to focus on foreign trade policy influences their trade-policy preferences.

The three surveys were fielded in very different contexts. The first was conducted in April 2019, at a period when US-China economic relations were improving. The US-China trade war started in March 2018, and escalated over the next few months. However, the two countries agreed to a truce in December 2018. At the time of our first survey, both sides appeared to be progressing positively towards an agreement to resolve the trade conflict.

Sino-US economic relations abruptly deteriorated on May 5, 2019, when then-President Donald Trump announced that tariffs would increase from 10 to 25% on \$200bn of China’s exports to America (alongside other measures).⁵ This was followed by the US announcement on May 16 to place Chinese telecommunications juggernaut Huawei on the “entity list,” which effectively prohibited American

⁴ Future work could usefully expand on the impact of other contextual features – for example, whether the identity of protectionist and target country matters, and whether or not the sequencing of protectionist actions matters.

⁵ When these tariffs went into effect on June 1st, the average American tariff on imports of Chinese goods increased from 12% to 17.6%, representing the largest US tariff increase, in percentage-point terms, in the US-China trade war thus far (Bown 2019).

businesses from dealing with the firm. China retaliated to these actions, raising its own tariffs on US imports and threatening to create its own “unreliable entity” list on foreign companies.⁶ Our second survey, which was fielded in July/August 2019, took place shortly after this dramatic escalation of the trade war, at an especially tense period in US-China trade relations.

The third survey was fielded in April/May 2021 during the first few months of the new Biden presidency and amidst the COVID-19 pandemic. Despite the switch from Republican to Democratic administration, the new US government decided to continue levying tariffs on China. In February 2021, the nominee for US Trade Representative declared that tariffs were a “legitimate tool” for managing economic relations with China (Reuters, 2021). The administration’s trade policy agenda released the following month noted that the government would use “all available tools” to tackle China’s “coercive and unfair economic trade practices” (US Trade Representative, 2021). Therefore, our third survey took place during a time where, while there had been no escalation of trade tensions and most countries were focused on pandemic-control efforts, a new US administration was nevertheless signaling a tough stance against China.

The amount and content of Chinese media coverage of the trade war that survey respondents would have received differed greatly between the three periods. As shown in Appendix A, the number of articles in the *People’s Daily*, the national Communist Party-run newspaper, focused on trade was far higher during the second survey than during the other two periods. Media coverage during the second survey was also focused primarily on the US-China bilateral relationship, and those articles tended to support an intermediate position on trade, one that advocated for protectionist retaliation, while also continuing to emphasize the virtues of free trade. By contrast, relatively few trade-related news articles during the time of the first and third surveys were focused on bilateral US-China relations. Media coverage of international trade in these periods focused on other trade partners and on trade in general, and these stories consistently supported free trade. The different policy context and information environment that survey respondents faced across the three surveys is useful because it implies that any findings that are consistent between the three surveys do not hinge on these contextual features.⁷

While subjects in the surveys were likely “pre-treated” with information about the trade war, the amount and nature of that pre-treatment varied across the three surveys. Since many subjects likely had some prior awareness about US protectionism, our experiment may underestimate the actual effect of US protectionism on trade attitudes (Druckman & Leeper, 2012). However, even those that are aware of US protectionism may not have it in the forefronts of their minds when answering our survey. The treatments in our survey are expected to work in this context by

⁶ For a more comprehensive description of this trade conflict, see Bown and Kolb (2020).

⁷ Since our media analysis focuses exclusively on articles using specific keywords, it may understate the degree to which media coverage on topics that are closely related to trade (e.g., indigenous innovation) changed over time. For instance, the emergence of the “dual circulation strategy” in late 2020 likely increased the media’s focus on the importance of domestic rather foreign demand. However, as our content analysis indicates, the Chinese media remained supportive of free trade in this period.

priming respondents about this particular facet of international trade, and thus raising the salience of this dimension of the issue.

The surveys were completed online using convenience samples. Subjects were recruited using a Chinese crowd-sourcing service that operates in similar fashion to Amazon's Mechanical Turk (see Appendix B for more details). In all, we reached around 3000 respondents from across the country for each survey. Overall the sample is younger and better educated than the average citizen. Yet, the "netizens" we sample are a politically important subset of China's population. This is precisely the population the Chinese government's online public opinion monitors are targeting in their own work (Denyer, 2013). Moreover, a recent study of the emerging trend towards Internet recruitment in China shows that online convenience samples generate attitude estimates that are highly consistent with national probability samples (Li et al., 2018).

One challenge with using online samples is the inattentiveness of respondents (Harden et al., 2019). To alleviate this concern, we follow Gueorguiev et al. (2020) and drop all subjects that completed the survey in less than five minutes.⁸ Respondents that completed the survey at that speed were likely paying limited attention to the questions. Importantly, however, Appendix C shows that our main findings are similar if we include all observations in our analyses or if we use different thresholds for excluding observations.

4 Main results

4.1 Experiment 1

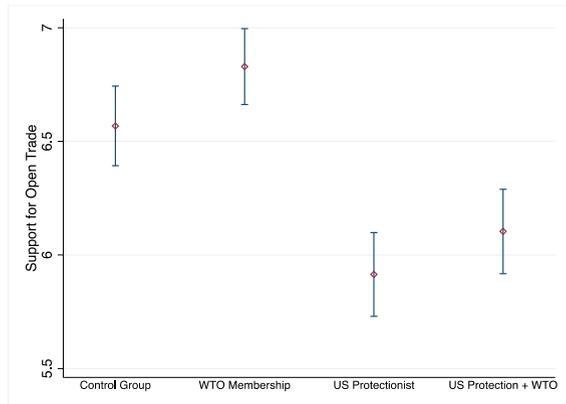
Our first survey experiment asked subjects what they think "*China should do with its international trade policy.*" The response options are based on an 11-point sliding scale, ranging from "increase trade barriers such as tariffs a lot" on one end to "decrease trade barriers such as tariffs a lot" on the other end. Higher values indicate more support for open trade.

There are four experimental conditions. The control group was simply asked the trade policy question stated above. A second group received a "US protectionist" prime stating that "*The United States has increased trade barriers such as tariffs on many foreign imports this year.*" A third group received a "WTO membership" prime stating that China is "*a member of the World Trade Organization, an international institution dedicated to promoting open trade.*" The fourth treatment combines the information of the previous two treatments.

Figure 1 displays mean levels of support for open trade, along with 95% confidence intervals, for the four groups. The typical respondent in the control group is

⁸ This solution is similar to Harden et al.'s (2019) proposal to exclude observations that spend insufficient time reading the experimental vignette. Since our experiment does not take long to read even for attentive respondents, it is more suitable in this context to focus on the total time respondents spend on the survey.

Fig. 1 Support for open trade (Experiment 1)



supportive of open trade, with a mean of 6.6 on a zero-to-ten scale, where 5 indicates support for neither increasing nor decreasing trade barriers. Subjects primed about China's WTO membership expressed a modest quarter-point stronger level support for trade on average compared to the control group ($p < 0.05$), suggesting that Chinese netizens care about the country's international commitments.

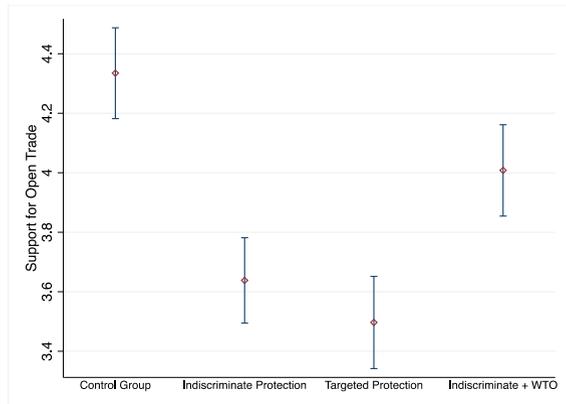
The "US protectionist" treatment reduces support for open trade. This effect is substantively and statistically significant. Average support for trade in this group was about two-thirds of a point below the average in the control group ($p < 0.01$). This mean difference reflects an overall shift in attitudes across the entire distribution of responses, as can be seen in Appendix Figure B1. Just 13% of control-group respondents favored trade protection (a score below 5) compared to 26% of those in the US protectionist treatment. The share of respondents that favored trade liberalization (a score above 5) declined from 74% in the control group to 61% in this treatment group.

The final column shows that information about US protectionism outweighs the impact of information about WTO membership. Among those that received this combined treatment, average support for trade was significantly lower than both the WTO treatment group and the control group ($p < 0.01$). While support for open trade was slightly higher in this fourth group than among those that were only informed about US protectionism, the difference is not statistically significant ($p = 0.156$). Overall, then, the first experiment provides modest evidence that WTO commitments can increase support for free trade and robust evidence that US protectionism lowers support for free trade.

4.2 Experiment 2

Our second experiment was aimed at determining if primes about US protectionism have similar effects in a different policy and information environment. This experiment also helps to assess whether certain forms of protectionist policies generate

Fig. 2 Support for open trade (Experiment 2)



stronger attitudinal responses. To this end, this experiment includes two separate treatments about US protectionism, one that describes US protectionism as indiscriminately carried out against a number of different trading partners and a second that describes the protectionism as being disproportionately targeted at China.

In this experiment, the question wording for the control group was identical to the first survey. The “indiscriminate protection” treatment notes that the “*United States has increased barriers such as tariffs on many foreign imports this year, including imports from all its major trading partners (Canada, Mexico, the European Union and China)*”. The “targeted protection” treatment states that the “*United States has increased trade barriers such as tariffs on Chinese imports this year, more than for any other country. At the same time, the United States has canceled tariff increases on other countries.*” Crucially, while the two statements emphasize contrasting aspects of US policy, both are factually accurate; the US has raised tariffs on all its major trading partners but the tariff increases have been disproportionately higher for Chinese imports.⁹ The treatments were written to frame US protectionism as differently as is feasible while keeping both statements consistent with actual policy choices. The inclusion of these two treatments allows us to test whether targeted forms of protectionism produce stronger attitudinal responses. Finally, we included a third treatment that combined the information in the “Indiscriminate Protection” treatment with the following prime about China’s legal commitments at the WTO: “*Countries that also increase their own tariffs would violate WTO rules (the WTO is an international institution dedicated to promoting open trade).*”

Figure 2 presents the means and 95% confidence intervals for respondent answers across the four experimental conditions. The first finding to note is that support for open trade in the control group is far lower in this second survey, fielded in July/August 2019, compared to one fielded just a few months earlier in April. The

⁹ Examples of trade barriers that were not targeted against China include the 2018 safeguards on solar panels and washing machine imports, and tariffs on steel and aluminum imports. In the targeted protection treatment, the language about canceled tariffs on other countries refers to the US decision to exempt the EU, Mexico, Canada, South Korea and others from steel and aluminum tariffs.

difference is about 2 points on an eleven-point scale. This likely reflects the escalation of trade tensions with the United States during the interim few months. While this decline in support could also have been affected by other contextual factors, such as the change in tone and prominence of Chinese media coverage of the trade war described earlier, we do not find strong evidence for this explanation. We examine the competing sources of this attitudinal shift in greater detail in Section V.

Despite these differences in the political context and baseline attitudes, the main results closely mirror those in the first survey. Support for open trade is lower in all three treatment groups, each of which mentions US protectionism, compared to the control group ($p < 0.01$ in all cases). These effects remain substantial. Average support for trade is 0.7 of a point lower in the “Indiscriminate Protection” treatment compared to the control group.¹⁰

Average support for open trade is even lower in the “Targeted Protection” treatment (mean = 3.50) compared to the “Indiscriminate Protection” treatment (mean = 3.64). This difference, however, is not statistically significant ($p = 0.19$). This suggests that US protectionism may not need to single out China to induce a protectionist response.

This experiment also shows that the WTO defuses protectionist attitudes about trade policy. Once again, the effects of US protectionism dominate the WTO effect, as mean support for trade in this composite treatment group is lower than the mean in the control group. At the same time, average support for open trade is 0.4 of a point higher among those that were told about US protectionism and WTO rules on retaliation than among those in the indiscriminate protectionist treatment group ($p < 0.01$).¹¹ On balance, the evidence indicates that while some contextual features, such as WTO rules and non-targeted forms of protectionism, may blunt citizens’ responses to US protectionism, the most striking finding is that US protectionism consistently lowers support for open trade.

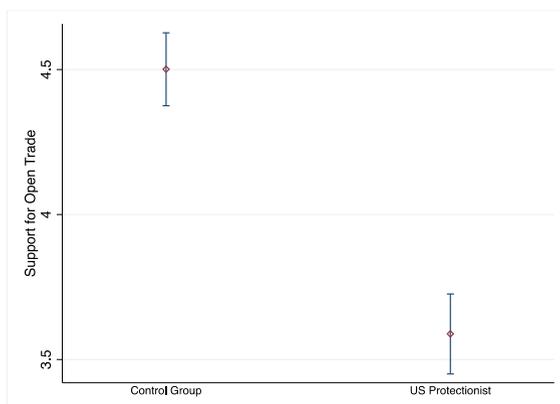
4.3 Experiment 3

The third experiment, which was fielded during Biden’s administration, helps ensure that the effects of US protectionism are not contingent on the presence of a specific US president or political party. The experimental design follows a simplified version of the first experiment, using the same control and US protectionist treatments. (The only difference is that this experiment omitted the WTO-related treatments). Figure 3 plots the mean levels of support for open trade for the two experimental conditions.

¹⁰ Similar to the first experiment, the treatment shifts the full distribution of responses in a protectionist direction (see Figure B2 in Appendix B). In this treatment condition, 68% of respondents were protectionist and 15% supported freer trade. By comparison, just 53% of control-group respondents were protectionist and 26% supported freer trade.

¹¹ One possible explanation for the stronger result in this case is that the second experiment highlighted that higher tariffs would violate WTO rules whereas the first experiment only mentioned that the WTO is dedicated to promoting open trade. It is plausible that legal commitments are viewed as a better reason to not retaliate than simply general principles of an organization.

Fig. 3 Support for open trade (Experiment 3)



The average level of support for trade in the control condition (4.5) is very similar to the mean from the second experiment. The US protectionism treatment reduces support for open trade by nearly a full point (-0.91) compared to the control group ($p < 0.01$).¹² These results suggest that US trade barriers have a similar effect on Chinese trade attitudes irrespective of whether the US is being governed by the Republicans under a Trump presidency or the Democrats under a Biden presidency.

5 Addressing potential threats to internal and external validity

5.1 Alternative explanation: The role of state propaganda

Could the protectionist responses to our experimental primes be conditioned by exposure to state propaganda emphasizing nationalism and anti-Americanism? Our checks indicate that while the Chinese media may have had some impact on how citizens responded to our treatments, it is unlikely that the responses observed are entirely driven by state propaganda. First, and most importantly, the treatment effects are very similar across the three experiments despite the fact that the amount and nature of state propaganda varied considerably across our three survey waves, as described earlier and demonstrated in Appendix A.

Second, if propaganda were the main driver of public opinion responses, we would expect individual news consumption to condition their responses to our treatments. This alternative explanation implies that respondents who consume large quantities of (nationalist) media should express lower baseline levels of support for open trade since the media would have already primed them about the trade war, and this group should also respond more strongly to our experimental treatments. To test this possibility, we ran a series of regressions that interacted each treatment with

¹² The proportion of respondents espousing a preference for protectionism (a score below 5) is 52% in the control group and 70% in the treatment group (see Appendix Figure B3).

a measure of self-reported news consumption. The results are presented in Appendix D. While news consumption significantly increases the protectionist response to the targeted protection treatment in our second experiment, the amount of news that individuals consume is not a statistically significant moderator for the other two treatments in the second experiment or for the main protectionist treatment condition in the first or third experiments. In addition, news consumption is strongly associated with *higher* levels of support for trade among control-group subjects in two of the surveys—the exact opposite of what would be expected if the Chinese media contributed to protectionist sentiments. This evidence suggests that state propaganda is not the only driver of Chinese protectionist sentiments and this alternative explanation cannot explain many of the patterns we observe in the data.

5.2 Representativeness of sample

Turning to the external validity of the findings, it is reasonable to wonder if all Chinese citizens would react to our treatments in the same manner as the netizens in our sample. To help address this question, we examine whether the observable dimensions in which our sample differs from the rest of the population moderate how subjects respond to our treatment effects. If responses to our treatments are similar for the young and old, poorly educated and highly educated, poor and rich within our sample, this would strongly indicate that our main findings are likely to generalize to the broader population. To this end, we estimate a series of models where we added multiplicative interaction terms between our treatments and age, income, and education. Appendix D shows that just one of the 21 interaction terms is statistically significant: in the first survey, responses to the “US protectionist” treatment were stronger among older respondents. If anything, then, the over-representation of younger individuals in the sample might be under-estimating the effect among average Chinese citizens. More importantly, public responses to US protectionism seem fairly uniform across these key demographic dimensions.¹³

5.3 The effects of US policy change on trade attitudes

Apart from the priming effects shown in our experiments, one might wonder whether actual shifts in US trade policy have similar effects on Chinese public opinion. Indeed, previous research suggests that treatments in survey experiments often have stronger effects than those of similar treatments that take place in the “real world” (Barabas & Jerit, 2010). We address this external validity question by examining whether the escalation of US protectionism in May 2019—in between the first two surveys—had a similar effect to our experimental primes. As noted earlier, levels of support for open trade were far lower among our control-group respondents

¹³ We also considered a range of other potential moderator variables, including party membership, hukou status, gender, employment in the private sector, level of national pride and pro-American sentiments. A small number of interaction terms were statistically significant, but no interaction coefficient is consistently significant across datasets (see Appendix D for more details and results).

in the second survey than those in the first survey. In Appendix E, we examine this decrease in support for trade between the first and second surveys in greater detail. We show, using multivariate regression models that include demographic controls as well as coarsened exact matching (Iacus et al., 2012) and entropy balancing methods (Hainmueller, 2012), that the fall in support cannot be explained by differences in the demographic composition of survey respondents across two surveys. This attitudinal shift also does not appear to be driven by shifts in state propaganda.¹⁴ Of course, this finding, that the escalation of the trade war reduced support for open trade, must be interpreted with some caution because we cannot fully rule out the possibility that respondents in the two surveys differ in ways that we are unable to measure. However, the association across surveys between US protectionism and stronger opposition to free trade among Chinese survey-respondents provides some external validation for our experimental results.

5.4 Applicability to other policy issues

Does US protectionism have a similar impact on attitudes on other international economic policy issues? In the first two surveys, we added one parallel experiment on another crucial component of the US-China economic conflict: high-technology innovation policy. As in our main experiments, we randomly assigned some respondents to be primed about US restrictions on high-technology products. Appendix F shows that the results of the two technology experiments closely mirror our findings on trade policy. Compared to a control group, respondents in the US protectionism treatment group are much less likely to favor technology cooperation with foreign firms. The results of these additional experiments suggest that US protectionism undermines support for international economic cooperation in multiple issue-areas, not just in the trade arena.

5.5 Evidence from beyond China

Lastly, we consider whether US protectionism has similar effects on public opinion towards trade outside of China. We fielded a similar experiment in another country that became a target of US protectionism: Argentina. Argentina is a useful case for examining the external validity of our findings given that it differs from China in many dimensions, including in its political and economic relations with the United States. Nevertheless, in December 2019, then-US President Donald Trump announced higher tariffs on imports of steel and aluminum from Argentina. As detailed in Appendix G, we embedded an experiment in a nationwide survey that was conducted by an Argentine polling firm between December 12 and 18, 2019 (N=1,216). Respondents were randomly assigned to either a control group, which

¹⁴ To test this explanation, Table E2 adds a measure of news consumption to the models. Doing so does not reduce the difference in trade attitudes across the two surveys. Finally, we explored whether news consumption and survey timing have interactive effects on trade attitudes, but the interaction term is not statistically significant.

was simply asked what they think Argentina should do with its international trade policy, and a treatment group that was told that “*a few days ago, the United States announced that it is increasing tariffs on Argentine goods.*” Appendix G shows that the treatment reduced the proportion of survey respondents that supported freer trade by 7.6 percentage-points ($p < 0.01$). This evidence indicates that the Chinese public reaction is not unique. Protectionism by the US reduces public support for open trade in target countries with very different political and economic characteristics.

6 The importance of direct versus generalized reciprocity

The final set of empirical analyses seek to understand *why* US tariffs influence trade attitudes in China. Specifically, we seek to quantify the importance of direct reciprocity motives in driving the shift in trade preferences. To do so, we draw on a question that we included in the third survey about attitudes towards bilateral trade with the US. This question was placed immediately after our main question about overall trade attitudes in the survey. This question asked respondents what they think “China should do with its trade policy towards the United States specifically”. The response options ranged, along an 11-point sliding scale, from “Increase trade barriers a lot” (0) to “Decrease trade barriers a lot” (10).

The direct reciprocity argument anticipates that US protectionism evokes a desire to retaliate by increasing China’s own trade barriers against the US. Thus, the treatment should reduce support for trade with the US. If direct reciprocity concerns are driving the overall decline in support for trade then opposition to US trade would also reduce support for trade overall. In other words, the direct reciprocity logic implies that US-specific trade attitudes mediate the relationship between the treatment and overall trade attitudes. If direct reciprocity fully accounts for the shift in trade attitudes, then the US trade attitudes variable will fully mediate the relationship between the treatment and overall trade attitudes—that is, the mediation effect would be equal to the total effect of the treatment. By contrast, if US trade attitudes do not fully account for the link between US protectionism and general trade attitudes, this would provide suggestive evidence that a generalized reciprocity logic is also at play.

The upper portion of Table 1 displays the main regression results from this analysis. These models control for several pre-treatment demographic variables that may influence attitudes about trade, namely income, gender, age, education, hukou (household registration) status, and membership in the Chinese Communist Party. It is appropriate to control for these pre-treatment variables because the mediator (unlike the treatment itself) is not randomly assigned, and may be correlated with these covariates, which could lead to bias if we failed to adjust for the effects of these variables (Imai et al., 2011, 770–772). The first column shows that the treatment reduces support for free trade with the United States. On the other hand, the size of the effect (-0.17) is quite small—just a fraction of the size of the effect of the treatment on overall trade attitudes (≈ 0.9). Column (2) shows that there is a fairly strong, and statistically significant, partial correlation between support for free

Table 1 Causal mediation analysis

	(1) Trade with US	(2) Open Trade
US Protectionist Treatment	-0.168* [0.076]	-0.826** [0.089]
Trade with US		0.450** [0.023]
External Dependence		
CCP Member	-0.059 [0.147]	-0.270* [0.113]
Urban Hukou	0.140 [0.092]	0.219* [0.090]
Education	0.191* [0.082]	0.006 [0.077]
Income	-0.094* [0.038]	0.004 [0.038]
Female	0.180 [0.101]	-0.039 [0.087]
Age	-0.043 [0.056]	-0.033 [0.055]
Constant	2.289** [0.260]	3.315** [0.252]
Observations	1,787	1,787
R-squared	0.015	0.234
Average Causal Mediation Effect	-0.08 [-0.14, -0.01]	
Average Direct Effect	-0.82 [-1.01, -0.65]	
Total Effect	-0.90 [-1.09, -0.72]	

Note: Top panel displays OLS regression coefficients and bootstrapped standard errors in parentheses. Bottom panel displays the total, direct, and average causal mediation effect of personal economic evaluations, with 95% confidence intervals in brackets. Estimation is based on Hicks and Tingley (2011). ** $p < 0.01$, * $p < 0.05$

trade with the US and support for free trade overall. That said, the correlation is far from perfect, and the treatment continues to exert a strong negative effect even after controlling for US-specific trade attitudes.¹⁵ This suggests that views about bilateral US-China trade do not entirely account for the decline in support for free trade.

¹⁵ The modest correlation between support for trade with the US and support for overall trade further indicates that respondents view these two questions as distinct. Moreover, Table 1 shows that the demographic correlates of these two attitudinal variables are different. Baseline levels of support for the two variables are also quite different: the control-group mean for Trade with US is 2.6 and the control-group mean for Open Trade is 4.5. These differences all suggest that attitudes about US trade and attitudes about overall trade are conceptually and empirically distinct.

In the bottom portion of Table 1, we use the output from these regression models to decompose the “total effect” of the experimental treatment into two components. The “average causal mediation effect” refers to the effect that is accounted for by trade attitudes towards the US (which is the mediator variable in this analysis). It is calculated as the product of two coefficients: (1) the estimated effect of the treatment on support for trade with the US from column 1 in the upper portion of the Table; and (2) the estimated effect of the mediator variable (support for trade with the US specifically) on the outcome variable (support for trade in general) from the column 2. The “average direct effect” is the remaining effect that consists of all other potential channels through which the treatment influences support for open trade. The average direct effect is measured as the effect of the treatment on overall trade attitudes, after controlling for the mediator (and pre-treatment covariates). In this context, the average direct effect provides a proxy for the operation of the generalized reciprocity channel.

We find that support for trade with the US has a modestly-sized mediation effect, accounting for about 9% of the total effect of the treatment on the outcome. The fact that the 95% confidence interval does not contain zero indicates that the causal mediation effect is statistically significant. Thus, we find some support for the direct reciprocity argument. However, it does not appear to be the only relevant consideration, as evidenced by the very large average direct effect. The presence of a large average direct effect of the treatment is suggestive of the presence of a generalized reciprocity effect.

The validity of our mediation results hinge on a key identifying assumption that no pre-treatment variables confound the relationship between the mediator variable (attitudes about trade with US) and the outcome variable (overall trade attitudes). While it is not possible to directly test whether this assumption holds, we use a form of sensitivity analysis developed by Imai et al. (2011) to help determine how robust our findings would be to violations of this assumption. Appendix H provides more details on the mechanics of this sensitivity analysis and presents the results of this analysis. There, we show that causal mediation effect of *Trade with US* is reasonably robust to potential violations of this assumption, both in an absolute sense and in comparison to other recently published survey-experimental studies. The direct effects are even less sensitive to unobserved confounding. Specifically, we find that the direct effect would be zero only if there is an omitted variable that strongly increases support for overall trade but strongly *decreases* support for trade with the US—a very unlikely scenario. Hence, our finding that direct reciprocity plays a role appears to be fairly robust, and the finding that direct reciprocity does not fully explain the shift in trade attitudes is arguably even more robust.

The order of our survey question is a second issue that could potentially impact our mediation estimates. Chaudoin et al. (2021) find that question order can influence the estimated size of mediation effects: in their analysis, two mediators had larger effects when mediator questions came before the outcome question, one mediator had a smaller effect in the mediator-first design, and one had very similar effects in the two designs. It is therefore possible that asking the outcome question (overall trade attitudes) before the mediation question (US-specific trade attitudes) impacted the magnitude of our mediation effects, and perhaps led us to under-estimate the

importance of direct reciprocity. In the most extreme case, the percent of the total effect mediated by one variable was about 4 times larger in the mediator-first design. If question order suppressed the mediation effect of US trade attitudes by this maximal amount in our experiment, the mediation effect would still account for less than 40% of the total effect under the alternative question order. While alternative survey designs could plausibly alter the size of the direct reciprocity and generalized reciprocity effects, such changes seem unlikely to change our conclusion that both types of reciprocity influence trade preferences. On balance, the evidence provides clear, albeit preliminary, support for the existence of both a direct reciprocity logic and a generalized reciprocity logic.

7 Conclusion

This study provides evidence that US protectionism has produced a consistent decline in public support for international economic cooperation in China, the world's second largest trading nation in 2019 and by far the largest among developing countries (WTO, 2019). Across three survey experiments run at very different periods in the US-China trade war, Chinese individuals that were reminded about US protectionism expressed considerably lower support for free trade than others. We also show that an increase in US tariffs on Chinese goods in June 2019 was associated with a dramatic decline in Chinese public support for open trade in the following months. Parallel experiments on technology policy indicate that these dynamics extend beyond trade into other areas of economic cooperation. Such reactions are not confined to China either. Additional evidence from Argentina shows that Argentine citizens—much like their Chinese counterparts—are less enthusiastic about lowering barriers to trade when informed about US tariff hikes. Finally, we demonstrate that two distinct facets of reciprocity likely contribute to this rise in protectionist sentiment: a direct reciprocity logic reflecting a desire to retaliate in kind to American tariffs, and a generalized reciprocity logic reflecting dampened enthusiasm for free trade at a more systemic level.

Our evidence contributes several new insights to our understanding of how citizens form opinions about international affairs. An emerging literature on the “first image reversed” has established that foreign countries’ behavior shapes domestic public opinion (Kertzer & Tingley, 2018). We add to this literature in several ways. First, we show that the logic of the first image reversed applies to the arena of trade. Second, we provide evidence suggesting that two different reciprocity dynamics operate to shape public attitudes on trade. Consistent with previous studies (Brutger & Rathbun, 2021; Chilton et al., 2020; Chu, 2019; Tingley & Tomz, 2014), we find that concerns about direct reciprocity shape attitudes about foreign policy. At the same time, our evidence also suggests that foreign government actions do not just change whether the public supports cooperation in the bilateral relationship with that specific government. The actions of foreign countries can also influence whether the public favors international cooperation on a global basis. These findings expand on existing research by showing that foreign country behavior affects not just

which countries the public prefers to cooperate with, but also *whether* they support international cooperation more generally.

Our findings suggest that foreign protectionism can have a profound impact on public opinion, but further research should probe how broadly these findings apply and should examine the operation of generalized reciprocity dynamics in greater depth. While our analysis focused on the actions of the world's largest economy (the United States) and the impact on its largest trading partner (China), future research could also examine how variation in the systemic importance of a country affects the degree to which individuals change their views about trade. For example, it is worth exploring whether the strength of the generalized reciprocity response is weaker when the protectionist country is less systemically important. Additional work could also investigate whether or not the degree of trade dependence in the target country affects the public's response to foreign protectionism. While this paper focused on distinguishing between direct and generalized reciprocity dynamics, it did not uncover the underlying reasons why these forms of reciprocity influence trade preferences. Future studies might test whether social-psychological, normative, and/or strategic considerations drive support for reciprocal trade-policy responses. Future research could also probe whether generalized reciprocity influences policy preferences in other issue-areas. It would also be useful to examine whether trade protectionism has broader spillover effects on other issue-areas, lowering the public's desire to cooperate not just on trade, but also in other arenas such as climate change or global health.

Our findings also have important policy implications. The survival of the open trading system will depend in no small part on retaining mass public support for free-trade policies, not just in the US as the world's most powerful state, but also throughout the rest of the world. The US' bipartisan shift towards protectionist trade policies has reduced public enthusiasm for free trade in targeted countries, including in the world's largest exporting nation, China. Weiss and Wallace (2021) note that international trade is an issue that China's Communist Party considers to be central for its survival. Consequently, China's government has a strong incentive to implement trade policies that are consistent with domestic public opinion; if the regime were to make trade concessions to the US in the face of strong domestic opposition, this would risk a "potentially destabilizing domestic backlash" (Weiss & Wallace, 2021, 644). The decline in support for international trade openness that we observe may therefore point to one of the reasons for why China has adopted more protectionist policies since 2018. If US protectionism also stokes protectionist sentiment elsewhere—as, for example, our evidence for Argentina indicates—other governments may be incentivized to raise trade barriers as well. Already, US tariff increases have imposed substantial direct costs on American consumers and businesses (Amiti et al., 2019). Since US protectionism also incentivizes foreign governments to increase their own tariff barriers, the total costs of these measures are likely to be even larger than is often appreciated.

8 Data availability statement

Upon acceptance of the article, the data that support the findings of this study will be posted at the Harvard Dataverse website: dataverse.harvard.edu.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s11558-022-09468-y>.

Acknowledgements For their advice on this project, we thank Kishore Gawande, Dimitar Gueorguiev, Kyle Jaros, John Kuk, Dan McDowell, the editor and anonymous referees at Review of International Organizations, audience members at the 2019 APSA and IPES conferences, and participants at the University of Arkansas Workshop on the US-China Trade War and those at the UCSD China Research Workshop. We also received excellent research assistance from Yue Lin, Yinxuan Wang, and Qiang Wu.

Declarations

Conflict of interest/Competing interest statement The authors did not receive support from any organization for the submitted work. The authors have no competing interests to declare that are relevant to the content of this article.

References

- Amiti, M., Redding, S., & Weinstein, D. (2019). The impact of the 2018 tariffs on prices and welfare. *Journal of Economic Perspectives*, 33(4), 187–210.
- Autor, D., Dorn, D., Hanson, G., & Majlesi, K. (2020). Importing political polarization? The electoral consequences of rising trade exposure. *American Economic Review*, 110(10), 3139–3183.
- Axelrod, R. (1984). *The evolution of cooperation*. Basic Books.
- Bagwell, K., & Staiger, R. (2004). *The economics of the world trading system*. MIT Press.
- Barabas, J., & Jerit, J. (2010). Are survey experiments externally valid? *American Political Science Review*, 104(2), 226–242.
- BBC. (2019). India announces retaliatory trade tariffs against the US. <https://www.bbc.com/news/world-asia-india-48650505> (March 3, 2022).
- Berkowitz, L., & Daniels, L. (1964). Affecting the salience of the social responsibility norm: Effects of past help on the response to dependency relationships. *The Journal of Abnormal and Social Psychology*, 68(3), 275.
- Blustein, P. (2019). *Schism: China, America, and the fracturing of the global trading system*. Waterloo: Center for International Governance Innovation.
- Bown, C. P., & Irwin, D. A. (2019). Trump's Assault on the Global Trading System. <https://www.foreignaffairs.com/articles/asia/2019-08-12/trumps-assault-global-trading-system> (August 22, 2019)
- Bown, C. P., & Kolb, M. (2020). Trump's Trade War Timeline: An Up-to-Date Guide. March 13. <https://www.piie.com/sites/default/files/documents/trump-trade-war-timeline.pdf>
- Bown, C. (2019). US-China Trade War Tariffs: An Up-to-Date Chart. October 11. <https://www.piie.com/research/piie-charts/us-china-trade-war-tariffs-date-chart>. Accessed 23 May 2022
- Brutger, R., & Rathbun, B. (2021). Fair share? Equality and equity in American attitudes toward trade. *International Organization*, 75(3), 880–900.
- Buckley, C. (2018). China Slaps Tariffs on 128 U.S. Products, Including Wine, Pork and Pipes. *The New York Times*. <https://www.nytimes.com/2018/04/01/world/asia/china-tariffs-united-states.html> (August 24, 2019)
- Bush, S., & Prather, L. (2020). Foreign meddling and mass attitudes toward international economic engagement. *International Organization*, 74(3), 584–609.
- Carnegi, A., & Gaikwad, N. (2022). Public opinion on geopolitics and trade. *World Politics*, 74(2), 167–204.
- Chaudoin, S., Gaines, B., & Livny, A. (2021). Survey design, order effects, and causal mediation analysis. *Journal of Politics*, 83(4), 1851–1856.
- Chen, J., Pan, J., & Yiqing, Xu. (2016). Sources of authoritarian responsiveness: A field experiment in China. *American Journal of Political Science*, 60(2), 383–400.

- Chilton, A. S., Milner, H. V., & Tingley, D. (2020). Reciprocity and public opposition to foreign direct investment. *British Journal of Political Science*, *50*(1), 129–153.
- Chu, J. (2019). A clash of norms? How reciprocity and international humanitarian law affect American opinion on the treatment of POWs. *Journal of Conflict Resolution*, *63*(5), 1140–1164.
- Colantone, I., & Stanig, P. (2018). The trade origins of economic nationalism: Import competition and voting behavior in Western Europe. *American Journal of Political Science*, *62*(4), 936–953.
- Denyer, S. (2013). In China, Communist Party Takes Unprecedented Step: It Is Listening. *The Washington Post*. https://www.washingtonpost.com/world/in-china-government-mines-public-opinion/2013/08/02/33358026-f2b5-11e2-ae43-b31dc363c3bf_story.html?noredirect=on&utm_term=.436f81588346. (August 24, 2019)
- DiGiuseppe, M., & Kleinberg, K. (2019). Economics, security, and individual-level preferences for trade agreements. *International Interactions*, *45*(2), 289–315.
- Distelhorst, G., & Hou, Y. (2017). Constituency service under nondemocratic rule: Evidence from China. *The Journal of Politics*, *79*(3), 1024–1040.
- Drezner, D. (2019). Economic statecraft in the age of trump. *Washington Quarterly*, *42*(3), 7–24.
- Druckman, J., & Leeper, T. (2012). Learning more from political communication experiments: Pretreatment and its effects. *American Journal of Political Science*, *56*(4), 875–896.
- Dufwenberg, M., Gneezy, U., Guth, W., & van Damme, E. (2001). Direct versus indirect reciprocity: An experiment. *Homo Oeconomicus*, *18*(1/2), 19–30.
- Fowler, J. H., & Christakis, N. A. (2010). Cooperative behavior cascades in human social networks. *Proceedings of the National Academy of Sciences*, *107*(12), 5334–5338.
- Goldstein, J. (1998). International Institutions and Domestic Politics: GATT, WTO, and the Liberalization of International Trade. In A. O. Krueger (Ed.), *The WTO as an International Organization* (pp. 133–160). University of Chicago Press.
- Gray, K., Ward, A. F., & Norton, M. I. (2014). Paying it forward: Generalized reciprocity and the limits of generosity. *Journal of Experimental Psychology: General*, *143*(1), 247.
- Greiner, B., & Vittoria Levati, M. (2005). Indirect reciprocity in cyclical networks: An experimental study. *Journal of Economic Psychology*, *26*(5), 711–731.
- Gruffydd-Jones, J. (2019). Citizens and condemnation: Strategic uses of international human rights pressure in authoritarian states. *Comparative Political Studies*, *52*(4), 579–612.
- Gueorguiev, D., McDowell, D., & Steinberg, D. (2020). The impact of economic coercion on public opinion: The case of US-China currency relations. *Journal of Conflict Resolution*, *64*(9), 1555–1583.
- Hainmueller, J. (2012). Entropy balancing for causal effects: A multivariate reweighting method to produce balanced samples in observational studies. *Political Analysis*, *20*(1), 25–46.
- Harden, J., Sokhey, A., & Runge, K. (2019). Accounting for noncompliance in survey experiments. *Journal of Experimental Political Science*, *6*, 199–202.
- Hayashi, Y. (2021). U.S. to Take Hard Line on Chinese Trade Practices, Administration Says. *The Wall Street Journal*. <https://www.wsj.com/articles/u-s-to-take-hard-line-on-chinese-trade-practices-administration-says-11614625200> (March 2, 2021)
- Helleiner, E. (2021). The return of national self-sufficiency? Excavating autarkic thought in a De-Globalizing Era. *International Studies Review*, *23*(3), 933–957.
- Hicks, R., & Tingley, D. (2011). Causal mediation analysis. *The Stata Journal*, *11*(4), 605–619.
- Iacus, S. M., King, G., & Porro, G. (2012). Causal inference without balance checking: Coarsened exact matching. *Political Analysis*, *20*(1), 1–24.
- Imai, K., Keele, L., Tingley, D., & Yamamoto, T. (2011). Unpacking the black box of causality. *American Political Science Review*, *105*(4), 765–789.
- Jin, Y., Dorius, S., & Xie, Y. (2022). Americans' attitudes toward the US–China trade war. *Journal of Contemporary China*, *31*(133), 17–37.
- Keohane, R. O. (1986). Reciprocity in international relations. *International Organization*, *40*(1), 1–27.
- Kertzer, J., & Tingley, D. (2018). Political psychology in international relations. *Annual Review of Political Science*, *21*, 319–339.
- Kuo, J., & Naoi, M. (2015). Individual attitudes. In L. Martin (Ed.), *The Oxford handbook of the political economy of international trade* (pp. 99–118). Oxford University Press.
- Landriault, M., & Minard, P. (2018). Canada/China free trade agreement: A public opinion appraisal. *Canadian Foreign Policy Journal*, *24*(1), 113–117.
- Li, W. (2019). Towards economic decoupling? Mapping Chinese discourse on the China-US trade war. *Chinese Journal of International Politics*, *12*(4), 519–556.
- Li, X., Shi, W., & Zhu, B. (2018). The face of internet recruitment: Evaluating the labor markets of online crowdsourcing platforms in China. *Research & Politics*, *5*(1), 1–8.

- Lu, C., & Tian, Y. (2008). Popular support for economic internationalism in mainland China: A six-cities public opinion survey. *International Political Science Review*, 29(4), 319–409.
- Ministry of Commerce, China. (2018). The Spokesperson of the Ministry of Commerce Makes Remarks on China's Release of a List of Discontinuation Concessions against the U.S. Steel and Aluminum Imports under Section 232. <http://english.mofcom.gov.cn/article/newsrelease/policyreleasing/201803/20180302723376.shtml> (June 20, 2018)
- Nguyen, Q., Sattler, T., Schweinberger, T. (2020). Power transitions and international economic cooperation: Experimental evidence from China and the U.S. Paper presented at 2020 APSA Annual Meeting.
- Niblett, R. (2017). Liberalism in retreat. *Foreign Affairs*, 96(1), 17–24.
- Palmer, D. (2021). Biden, in first trade move, reimposes a Trump tariff. *Politico*. <https://www.politico.com/amp/news/2021/02/01/biden-aluminum-tariff-uae-464794>. (February 11, 2021)
- Reuters. (2021). Katherine Tai, Biden's Top Trade Nominee, says Tariffs are 'Legitimate Tools' to Counter China. <https://www.cnbc.com/2021/02/26/katherine-tai-says-tariffs-as-legitimate-tools-to-counter-china.html> (Feb. 25, 2021)
- Rhodes, C. (1989). Reciprocity in trade: The utility of a bargaining strategy. *International Organization*, 43(2), 273–299.
- Shi, W., & Zhu, B. (2019). The Dilemma of Managing International Tensions in Authoritarian Countries: Evidence from the Ongoing U.S.-China Trade War. Paper presented at 2020 APSA Annual Meeting.
- Simpson, B., Harrell, A., Melamed, D., Heiserman, N., & Negraia, D. V. (2018). The roots of reciprocity: Gratitude and reputation in generalized exchange systems. *American Sociological Review*, 83(1), 88–110.
- Spilker, G., Bernauer, T., & Umaña, V. (2016). Selecting partner countries for preferential trade agreements. *International Studies Quarterly*, 60(4), 706–718.
- Stanca, L. (2009). Measuring indirect reciprocity: Whose back do we scratch? *Journal of Economic Psychology*, 30(2), 190–202.
- Stevastopulo, D. (2021) US targets China rare earth magnets for possible tariffs. *Financial Times*. <https://www.ft.com/content/30dac928-e54a-4925-a1fa-e8bc6a7adae7> (July 4 2021)
- Tingley, D., & Tomz, M. (2014). Conditional cooperation and climate change. *Comparative Political Studies*, 47(3), 344–368.
- US Trade Representative. (2021). *2021 Trade Policy Agenda and 2020 Annual Report*. Available at <https://ustr.gov/sites/default/files/files/reports/2021/2021%20Trade%20Agenda/Online%20PDF%202021%20Trade%20Policy%20Agenda%20and%202020%20Annual%20Report.pdf>
- Wang, O., & Xin, Z. (2018). Xi Jinping says trade war pushes China to rely on itself and 'that's not a bad thing'. *South China Morning Post*. <https://www.scmp.com/economy/china-economy/article/2165860/xi-jinping-says-trade-war-pushes-china-rely-itself-and-thats> (July 29, 2020)
- Weiss, J. C. (2014). *Powerful patriots: Nationalist protest in China's foreign relations*. Oxford University Press.
- Weiss, J. C., & Dafoe, A. (2019). Authoritarian audiences, rhetoric, and propaganda in international crises. *International Studies Quarterly*, 63, 963–973.
- Weiss, J. C., & Wallace, J. (2021). Domestic politics, China's rise, and the future of the liberal international order. *International Organization*, 75(2), 635–664.
- Whitham, M. M. (2021). Generalized generosity: How the norm of generalized reciprocity bridges collective forms of social exchange. *American Sociological Review*, 86(3), 503–531.
- WTO. (2019). *World Trade Statistical Review 2019*. Available at https://www.wto.org/english/res_e/statistics_e/wts2019_e/wts2019_e.pdf
- Yeung, E., & Quek, K. (2022). Relative Gains in the Shadow of a Trade War. *International Organization*. Forthcoming 1–25.
- Zhao, S. (2013). Foreign policy implications of Chinese nationalism revisited: The strident turn. *Journal of Contemporary China*, 22(82), 535–553.
- Zitek, E. M., Jordan, A. H., Monin, B., & Leach, F. R. (2010). Victim entitlement to behave selfishly. *Journal of Personality and Social Psychology*, 98(2), 245–255.