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How Employment Framing Affects Trade Preferences: Evidence from Survey Experiments^{*}

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Abstract

International trade increases aggregate welfare but also creates winners and losers, making it politically contentious. Recent research has established that individuals are more sensitive to anti-trade information about the prospect of employment loss than to pro-trade information about lower prices or greater variety. In this paper, we study how individual attitudes and beliefs change in response to information about employment losses (in import-competing sectors), gains (in export-oriented sectors), and the possibility of compensation for displaced workers. To this end, we conducted a large-scale survey experiment in 18 Latin American countries using nationally representative samples. We find that anti-trade information reduces support for trade even when compensation is mentioned, while pro-trade messages increase support only when they emphasize job gains. Belief updating about trade's employment effects seems to be a relevant mechanism. Our findings have important implications on what types of messaging work to increase support for trade: Although compensation is often recommended to build support for trade liberalizations, it can backfire in practice. At the same time, emphasizing employment creation in export sectors offers a more effective strategy to bolster public support for trade policies.

Keywords: International trade, attitudes, employment, survey experiment, Latin America
JEL Classification: F13, D72

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1 Introduction

Trade is a contentious political issue. Although freer trade increases welfare in the aggregate, welfare gains can only materialize if the economy reallocates physical and human capital across sectors, which is a costly process that inevitably creates winners and losers at least in the short- to medium-term (Murphy and Topel, 1987; Neal, 1995; Dix-Carneiro, 2014; Yi et al., 2017). At the individual level, the gains from trade stem from higher product variety and lower prices. Gains may also relate to increase in employment in exporting sectors, while the losses can materialize as unemployment spells.¹

How are individual attitudes towards trade shaped by rhetoric and messaging, both in favor and against increased trade with other countries? Recent research has established that, when forming their trade preferences, individuals are more sensitive to negative information about the prospect of employment loss than positive information regarding product prices and variety (Hiscox, 2006; Ardanaz et al., 2013; Rodríguez Chatruc et al., 2021; Alfaro et al., 2023; Stantcheva, 2022). That is, we know what works to *decrease* support for trade but we still do not know what works to *increase* it.

However, there are still promising avenues to increase support for trade (or mitigate a reduction in support) that have yet to be fully explored. A first one is to assess how individuals would react to positive information regarding trade’s impact on the increase in employment in exporting firms. If individuals care about employment, then, it is reasonable to expect that a pro-trade, job-gain message would increase support for trade. A second one is to look into whether *loss aversion* plays a role—this is, if individuals react more strongly to losses than to gains—by stating pro-trade arguments in terms of losses, for example, by highlighting that jobs may be lost in some sectors due to decreased trade.² Lastly, a third one is to investigate how individuals would react to the possibility of government compensation to those who lose their jobs because of trade. If individuals tend to care about employment loss, mentioning the possibility of compensation may dampen the negative effect of information about job losses.

In this paper, we fill this gap by studying how people’s attitudes and beliefs change in response to information that highlights potential employment losses (in import-competing sectors), to information that highlights employment gains (in export-oriented sectors), and to information mentioning the possibility of compensation to those displaced by trade. To this end, we conducted a large-scale survey experiment in nationally representative samples of 18 Latin American countries. We exposed a random subset of the

¹Individual gains (losses) from trade can also materialize as higher (lower) wages or higher (lower) returns on capital. We focus here on employment and product variety for simplicity.

²We borrow from Hiscox (2006) ideas here.

respondents to one of four information treatments before asking them if they support increasing or restricting trade (a control group was not given any information). The treatments were: *Anti-Trade/Job-Loss* (T_1) in which we mentioned that **expanding** foreign trade may **reduce** jobs at firms that compete with imported products; *Anti-Trade/Compensate* (T_2) in which we mentioned that **expanding** foreign trade may **reduce** jobs at firms that compete with imported products and mentioned the possibility of **compensating** the affected workers; *Pro-Trade/Job-Gain* (T_3) in which we mentioned that **expanding** foreign trade may **increase** jobs at firms that sell products to other countries; and *Pro-Trade/Job-Loss* (T_4) in which we told respondents that **restricting** foreign trade may **reduce** jobs at firms that sell products to other countries. To explore belief updating as a potential mechanism, immediately post-treatment we asked respondents if they believed increased trade led to higher or lower employment and to higher or lower product variety at affordable prices. We also elicited respondents' prior beliefs (i.e., pre-treatment) about trade that may be correlated with trade support: their knowledge of what experts think are the consequences of trade and their opinions on the effect on domestic culture of the interaction with other countries.

Our main finding is that anti-trade information reduces support for trade even if compensation to losers is mentioned and that pro-trade messages increase support only if the messages are cast in terms of job gains in response to increases in trade, but not if they are cast in terms of job losses as a result of restricting trade. In line with previous literature, the first treatment *Anti-Trade/Job-Loss* (T_1) significantly reduces support for trade. In fact, this treatment reduces such support by 6.7 percentage points (p.p.) compared to the control group, whose average support for trade is 81 percent. Contrary to our expectations, mentioning the possibility of compensating workers displaced by foreign competition (*Anti-Trade/Compensate*, T_2) significantly increases the negative effect of T_1 , with support for trade being 8.5 p.p. lower than the control group. Although we cannot test why, we suspect that promising compensation for displaced workers increases the salience of the adverse consequences of trade. Alternatively, it is possible that compensation may require increasing taxes or scaling down other social programs with perceived negative consequences for the respondent. *Pro-Trade/Job-Gain* (T_3), which mentions the positive effects of trade on exporters' employment increases support for trade in around 3.6 p.p compared to the control group. However, casting a similar pro-trade argument in terms of avoiding job losses instead of creating job gains does not yield any discernible impact: *Pro-Trade/Job-Loss* (T_4), which emphasizes the consequences of restricting trade for exporters' employment does not affect support (the coefficients are close to zero and imprecise). Note that focusing on exporters' gains from increased trade has a more muted

effect than focusing on non-exporting firms' losses due to increasing import competition.

The fact that we obtain significant results suggests that these messages likely contribute to changing people's minds, and are not simply "preaching to the converted," and just helping cement previously held views. To look into this issue in more detail, we explore heterogeneous effects across the two prior beliefs mentioned above. For the Anti-Trade treatments T_1 and T_2 , we find that the effects are more negative for those holding positive or mixed ex-ante views. In contrast, for Pro-Trade treatments T_3 and T_4 , the effects are more positive among those who held negative prior views. These results suggest that, positive messages on the employment impact of trade tend to affect the attitudes of those who were predisposed against trade in the first place, while the opposite happens with negative messages. This pattern is also consistent with belief updating, in which individuals adjust their beliefs when faced with information that contradicts their priors (Benjamin, 2019).

Finally, we explore in more detail the role of belief updating as a potential mechanism mediating attitudinal change. To this end, we conduct a formal mediation analysis (Imai et al., 2010b; Celli, 2022). We decompose the total effect of the different treatments on support for trade into their direct effect and the effect mediated through belief updating. We find that changes in the belief that trade increases employment (significantly) explain 31.6% of the effect of T_1 , 21.8% of T_2 , and 33.6% of T_3 . For the belief that trade decreases employment, the mediated effect explains 23% of the impact of T_1 , 12.9% of T_2 , and 32.2% of T_3 . Considering both beliefs jointly, we find then that the mediated effect is approximately 34-55% of the total effect. This suggests that belief updating plays an important role in explaining the observed changes in trade support.

This paper relates to the literature studying the determinants of individual attitudes toward international trade. Early studies focused on economic determinants, such as the level of education, either using national survey data (Canada: (Balistreri, 1997; Beaulieu, 2002), the United States: (Scheve and Slaughter, 2001; Blonigen, 2011) or international surveys (O'Rourke and Sinnott, 2001; Beaulieu et al., 2005; Mayda and Rodrik, 2005; Mayda, 2008; Jäkel and Smolka, 2017) and found evidence supportive of the predictions of the Stolper–Samuelson Theorem, that is, that high-skilled (low-skilled) individuals are more supportive of freer trade in skill (low-skill) abundant countries. A related strand of research found that economic interests explain only part of the variation in trade attitudes and that individual characteristics such as gender and ideology (Kuo and Naoi, 2015), exposure to knowledge (Hainmueller and Hiscox, 2006), or certain cultural values, such as nationalism or isolationism (Mansfield and Mutz, 2009; Margalit, 2012), also play a role.

Given the limitations of observational studies, a strand of research has focused on conducting survey experiments to generate exogenous variation in support for trade. The pioneering work by [Hiscox \(2006\)](#) for the United States found that anti-trade information, linking trade to job losses, significantly reduced support for trade while pro-trade information linking trade to lower prices for consumers, did not increase support. These findings replicate for Argentina ([Ardanaz et al., 2013](#)) and for a sample of eighteen Latin American countries ([Rodríguez Chatruc et al., 2021](#)). Regarding mechanisms, positive framing shifts upward respondent beliefs that trade reduces consumption prices, but also raises concerns about low wages. Negative framing substantially weakens the prevailing belief that trade brings higher employment ([Rodríguez Chatruc et al., 2021](#)). As we mentioned earlier, we contribute to this literature by exploring three ways to increase support for trade (or mitigate a reduction in support): to provide positive information regarding trade’s impact on the increase in employment in exporting firms; to state pro-trade arguments in terms of losses; and to provide information about the possibility of government compensation to those who lose their jobs because of trade.³

Two recent studies using US data are closely related to ours and, therefore, deserve a separate mention. [Alfaro et al. \(2023\)](#) also replicates the finding that anti-trade information regarding job losses linked to trade reduces trade support but, surprisingly, they find that information about the positive impact of trade on employment reduces support for trade (although less than information regarding job losses). Although this treatment is similar to our *Pro-Trade/Job-Gain* treatment, it is worth noting that their treatment is a narrative about the job creation effects in non-manufacturing US sectors brought about by changes in trade, including those associated with China’s accession to the WTO. It is then possible that, given the importance of employment considerations and China for the formation of trade preferences in the United States, this narrative may increase the salience of import competition and other geopolitical considerations so that the effect the authors find compounds also that of an anti-trade narrative. In contrast, our treatment only mentions job gains, without evoking import competition. Geopolitical considerations are also more limited in our sample of Latin American countries.

[Stantcheva \(2022\)](#) also replicates several of the findings in the previous paragraphs and, in addition, finds that individuals exposed to information about adverse distributional consequences of trade and ways to compensate losers do not change their support

³[Di Tella and Rodrik \(2020\)](#) study preferences for government intervention in response to labor market shocks of different origin and find that unemployment compensation and training assistance are generally preferred to import protection. However, exposure to information about labor market shocks results in a large increase in support for government intervention in the form of trade protection rather than financial assistance.

for trade. In this case, this treatment is similar to our *Anti-Trade/Compensate* treatment, however, the treatment in that study also includes information about consumer-side effects of trade (i.e., goods become cheaper and the variety of goods increases). Therefore, their results may conflate the impact of pro-trade messaging. In contrast, our treatment only mentions job losses and compensation, without evoking consumer gains, which may explain our overall negative effects.

The remainder of the paper is organized as follows. The next section describes the experimental design, the data used in the analysis, and our empirical approach. Section 3 presents our main results on the effects of the treatments on support for trade and beliefs. Section 4 explores the mechanisms behind our results and describes our mediation analysis. Section 5 concludes.

2 Empirical strategy

2.1 Data and experimental design

We use data from the LAPOP’s AmericasBarometer for the year 2021.⁴ The AmericasBarometer is a nationally representative survey of voting-age adults in up to 34 countries in North, Central, and South America. The survey measures attitudes, evaluations, experiences, and behavior for the respondents using a common methodology and core questionnaire, which ensures comparability across countries and, in some cases, over time. Due to the COVID-19 pandemic, data collection for the 2021 round was carried out using Computer-Assisted Telephone Interviewing (CATI). Consistent with this change, the sampling design transitioned from probability sampling of geographic areas to Random-Digit Dialing (RDD). The sampling frame corresponded to all possible phone numbers in a given country (excluding business-only phones) and the statistical unit of interest was the individual.

We implemented an experiment in the 2021 AmericasBarometer survey. We randomly assigned half of the individuals interviewed in 18 countries participating in the survey to five groups that received different information about the effects of trade on employment and then we asked about their support for trade. The randomization took place within each country and gender cell and the probability of assignment to each experimental group was the same (i.e., 20% chance each).⁵ The information frames and the following

⁴Because of technical issues, the survey for Nicaragua was repeated in the summer of 2022. All our results are robust to excluding this country from the sample (results available upon request).

⁵Of the 22 countries in this round of the AmericasBarometer, four were not part of the experiment: Canada, Dominican Republic, Haiti, and the United States. Dominican Republic and Haiti were not in-

trade support questions had the following wording:⁶

- *Control group (C)*: [Country] buys and sells products to other countries. What is your opinion about foreign trade between [country] and other countries?
- *Anti-Trade/Job-Loss (T_1)*: [Country] buys and sells products to other countries. Expanding foreign trade may reduce jobs at firms that compete with imported products. What is your opinion about foreign trade between [country] and other countries?
- *Anti-Trade/Compensate (T_2)*: [Country] buys and sells products to other countries. Expanding foreign trade may reduce jobs at firms that compete with imported products. What would be your view on foreign trade between [country] and other countries if the government compensated the affected workers?
- *Pro-Trade/Job-Gain (T_3)*: [Country] buys and sells products to other countries. Expanding foreign trade may increase jobs at firms that sell products to other countries. What is your view on foreign trade between [country] and other countries?
- *Pro-Trade/Job-Loss (T_4)*: [Country] buys and sells products to other countries. Restricting foreign trade may reduce jobs at firms that sell products to other countries. What is your opinion about foreign trade between [country] and other countries?

The answer options were “You support expanding trade” and “You support restricting trade”, with the order of the possible answers being also randomized between respondents. The surveyors were instructed to read the options to the respondents. In total, there are 27,310 observations in the experiment with each of the five experimental groups having around one-fifth of the sample. The number of observations by treatment arm and country is available in Table B.1 in Appendix B.

Notice that as in [Rodríguez Chatruc et al. \(2021\)](#), our questions on support for trade do not mention specific policies such as trade agreements or tariffs, but instead focus on policy outcomes. The main reason for this is that we wanted to maintain a high degree of

cluded for logistical reasons, and Canada and the United States because of our focus on Latin American countries. Table B.1 in the Appendix has the list of countries in the experiment. The experiment was applied to half of the sample of individuals in each of the countries due to a split design adopted by AmericasBarometer to keep the length of the questionnaire manageable.

⁶The original questions in Spanish for the survey experiment are available in Appendix A. In countries where the official language is not Spanish, we translated the questions with the help of the implementation partners.

accessibility to as many respondents as possible. Our questions do not differentiate between exports and imports either, which follows from the fact that in practice most policy instruments affect both flows at the same time and, in many cases, in similar directions.

Immediately after the question on support for trade and independent of the experimental group, respondents were asked about their beliefs regarding the consequences of expanding trade on employment, as well as on the variety and prices of products available in their countries. For the case of employment, the answer options were “More jobs,” “Fewer jobs,” and “No change in jobs.” For variety/prices, they were “More variety of products at affordable prices,” “Less variety of products at affordable prices,” and “No changes in the products available.” Using these questions, we test if the individuals in the treatment groups update differently their beliefs on the effect of trade, especially when compared with the control group.

In addition to the questions about support for trade and beliefs, we asked respondents about knowledge of what experts think are the consequences of trade, with the answer options being “Most believe trade is beneficial for a country’s economy,” “Some believe trade is beneficial, others that trade is detrimental,” and “You don’t know or have not thought much about this.” We also elicited their opinions about the effect on domestic culture of the interaction with ideas, people, and products from other countries, with the answers being “Positive influence,” “Negative influence,” and “No influence.” Given that these two questions were placed in the questionnaire *before* the survey experiment, we use them as indicators for prior knowledge and opinions of the respondents about trade-related issues, which allows to evaluate if the effect of our treatments vary according to the individuals’ priors.

To give a sense of support for trade and the characteristics of the respondents, Table B.2 in the Appendix shows the descriptive statistics of key variables for the control group. As can be seen, support for trade is relatively high for the countries in our sample, with around 81% of the respondents supporting increases in trade. It is also the case that most respondents believe that trade leads to increases in employment (72%) and in product variety (65%). We also see positive views on the influence of foreign countries on domestic culture (62%). However, only half of them (49%) respond that experts view trade as beneficial. Overall, the individuals in our sample view trade favorably, which is consistent with previous evidence for Latin American countries ([Rodríguez Chatruc et al., 2021](#)).

2.2 Empirical specification

Given the random assignment of the treatments, we estimate the effects of information on support for trade with the following specification:

$$y_{ij} = \beta_1 T_{1ij} + \beta_2 T_{2ij} + \beta_3 T_{3ij} + \beta_4 T_{4ij} + \mathbf{x}_{ij}'\gamma + \alpha_j + \epsilon_{ij}, \quad (2.1)$$

where y_{ij} is an indicator variable for favorable trade support or for agreeing with a given consequence of trade for individual i in country j , T_{nij} is a dummy for respondents in the treatment group n , \mathbf{x}_{ij} is a vector of individual characteristics (age, gender, marital status, education, employment status, and order effects), α_j are country fixed effects, and ϵ_{ij} are the unobservables, that we allow to be heteroskedastic.⁷ The coefficients of interest are the β 's, that measure the conditional difference between the treatment group under consideration and the control group.

As was mentioned before, we collected information on the respondent's knowledge and opinions on openness-related issues before the treatments took place. Leveraging this variation, we estimate specifications with the following form:

$$y_{ij} = \sum_k \left(\sum_n \beta_{n,k} T_{nij} v_{ij}^k + \theta_k v_{ij}^k \right) + \mathbf{x}_{ij}'\gamma + \alpha_j + \epsilon_{ij}, \quad (2.2)$$

where v_{ij}^k is an indicator variable for the ex-ante opinion on openness and the rest of variables were described before. We define v_{ij}^k in two alternative ways. First, we use the information on the expert's opinions and create three dummy variables equal to one if the respondent states that experts view trade as having positive consequences on the economy, negative consequences, or mixed consequences (including those responding "don't know"), respectively. Second, with the question about the effects on culture of interacting with foreign countries, we define indicators for individuals with mostly positive views on this matter, negative views, or do not have strong views, respectively. The coefficient of interest now is the $\beta_{n,k}$, which measures the effect of T_n when the ex-ante opinion on openness is positive, negative, or neutral, respectively.

We also explore treatment-effect heterogeneity by country characteristics. In particular, we estimate the following expression:

$$y_{ij} = \sum_n \left(\beta_n T_{nij} + \beta_{n,z} T_{nij} Z_j \right) + \mathbf{x}_{ij}'\gamma + \alpha_j + \epsilon_{ij}, \quad (2.3)$$

⁷Given that the randomization was at the individual level and that the survey corresponds to a stratified random sampling, we do not need to cluster the standard errors at any level (Abadie et al., 2023). We still use robust standard errors though.

with Z_j being a variable at the country level, which is absorbed by the country fixed effect (α_j). We report results for two sets of indicators of interest. First, we test if the treatment effects vary depending on recent import accelerations and overall trade accelerations, which we measured as the difference between the changes in 2016-2019 and 2013-2016 for the respective flow. Second, we estimate heterogeneous effects based on changes in unemployment between 2016 and 2019. We obtained the trade and unemployment information from the World Development Indicators. The idea is to analyze whether treatments are more or less impactful when the economy is stressed by a recent surge in trade flows, or changes in unemployment, both of which could make the relationship between trade and employment more salient.

Even though we were able to assign the different treatments at random and, therefore, the respondents in the different experimental groups are expected to have similar characteristics on average (Angrist and Pischke, 2008), it is still useful to show that there is balance in observables. Table B.3 in the Appendix reports the comparison between the treatment and control groups along several dimensions relevant to the analysis. In particular, we compare the groups in terms of basic socioeconomic characteristics (gender, age, education, etc.) and several attitudes and opinions, including trust in the government and ex-ante views on trade (v_{ij}^k in (2.2)). As can be seen in the table, the differences between the individuals in each of the treatment arms and the control group are small and, in almost all cases, statistically insignificant. Even though these results lend credibility to our experimental design, below we show that our results are robust to adding socioeconomic characteristics as controls.

3 Results

This section presents our estimates of the effect of the information treatments on trade support and on the beliefs about trade consequences. We also discuss the heterogeneity of the treatment effects using our indicators for individuals' prior (i.e. pre-treatment) knowledge and opinions on trade, other individual characteristics such as education, and variation on recent trade flows and unemployment changes at the country level.

3.1 Treatment effects on trade support

We start our empirical analysis by estimating equation (2.1) via OLS. Table 1 reports a series of estimates for β_1 - β_4 for different specifications: column (1) shows the results without controls, (2)-(4) add country fixed effects, basic socioeconomic characteristics (age,

gender, education, etc.), and order effects, respectively, and (5) includes all the controls at the same time. In Table B.4, we show our results are robust to controlling for the individual characteristics used in our balance tests. As explained above, given the level of the randomization, we use robust standard errors.

Table 1: Average treatment effects and support for trade

| Variables | (1) Support | (2) Support | (3) Support | (4) Support | (5) Support |
|---------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Anti-Trade/Job-Loss (T_1) | -0.063*** (0.008) | -0.063*** (0.008) | -0.064*** (0.008) | -0.063*** (0.008) | -0.065*** (0.008) |
| Anti-Trade/Compensate (T_2) | -0.083*** (0.008) | -0.083*** (0.008) | -0.084*** (0.008) | -0.083*** (0.008) | -0.085*** (0.008) |
| Pro-Trade/Job-Gain (T_3) | 0.038*** (0.007) | 0.037*** (0.007) | 0.036*** (0.007) | 0.037*** (0.007) | 0.035*** (0.007) |
| Pro-Trade/Job-Loss (T_4) | -0.003 (0.008) | -0.005 (0.008) | -0.001 (0.007) | -0.003 (0.008) | -0.004 (0.007) |
| Observations | 27,310 | 27,310 | 27,310 | 27,310 | 27,310 |
| R-squared | 0.011 | 0.022 | 0.043 | 0.013 | 0.059 |
| $\beta_1 = \beta_2$ (p-value) | 0.019 | 0.019 | 0.016 | 0.019 | 0.016 |
| $\beta_1 = -\beta_3$ (p-value) | 0.054 | 0.046 | 0.032 | 0.051 | 0.022 |
| $\beta_3 = \beta_4$ (p-value) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Country fixed effects | NO | YES | NO | NO | YES |
| Individual controls | NO | NO | YES | NO | YES |
| Order effects | NO | NO | NO | YES | YES |

Note: The dependent variable is a dummy equal to one if the individual supports increasing trade. All columns report the estimates for equation (2.1). Individual controls include age, gender, marital status, education level, and employment status. Order effects correspond to a dummy if the first answer option for the support-for-trade question was “increasing trade.” Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

The main message that emerges from Table 1 is that anti-trade information reduces support for trade and that pro-trade messages increase support only if they are worded as job gains. In line with Rodríguez Chatruc et al. (2021) and Alfaro et al. (2023), the treatment stressing employment losses from import competition (Anti-Trade/Job Loss, T_1) significantly reduces support for trade by 6.7 percentage points in comparison to the control group.⁸ Interestingly, mentioning the possibility of compensating the work-

⁸It is worth noting that we find substantially smaller effects for the Anti-Trade/Job Loss treatment (T_1) compared to Rodríguez Chatruc et al. (2021), who estimate a reduction in trade support of approximately 25 percentage points for a similar group of countries. Several factors may explain this difference. First, beyond wording differences, their experiment presented both the information treatment and the trade

ers displaced by foreign competition (Anti-Trade/Compensate, T_2) actually significantly *strengthens* this negative effect, with support for trade being 8.5 percentage points lower for this treatment with respect to the control group. One potential explanation is that promising compensation for displaced workers increases the salience of the adverse consequences of trade. Another possibility is that compensations may require other policy changes (for example, increasing taxes or scaling down other social programs) with perceived negative consequences for the respondent.⁹ More research is needed to understand the relationship between compensation mechanisms and support for trade.

Regarding pro-trade treatments, *Pro-Trade/Job-Gain* (T_3) tests how respondents react to highlighting the positive effects of trade on exporters' employment. Our results suggest that this treatment increases support for trade by around 3.6 percentage points. The last treatment—which emphasizes the consequences of *restricting* trade for exporters' employment (*Pro-trade/Job-Loss*, T_4)—does not affect support for trade: the point estimates are small and statistically indistinguishable from zero. This is the only one of our treatments that is ineffective in switching respondents' trade support. The contrast between the two pro-trade treatments (i.e., comparing T_3 with T_4) suggests that the exact wording of these messages, and whether they stress gains or losses, is very important when trying to elicit attitude changes.

It is worth mentioning that our results for T_3 turned out to go in the opposite direction to the findings in [Alfaro et al. \(2023\)](#). In particular, they find that pro-trade information (either on employment or prices) leads to a *lower* support for trade in a sample of US respondents. Given the central role of employment and China in the formation of trade preferences in the United States, it is possible that their pro-trade treatments increased the prominence of import competition and other geopolitical considerations leading to a backfire in the support for trade.¹⁰ In contrast, our T_3 only mentions job gains from exports, without making any reference to import competition. Moreover, the favorability

support question simultaneously, which may have increased the salience of the message. Second, our experiment was conducted during the COVID-19 pandemic and in the aftermath of the US–China Trade War, two events that may have altered baseline trade preferences ([Steinberg and Tan, 2023](#)) or reduced individuals' responsiveness to new information.

⁹These results contrast with [Stantcheva \(2022\)](#), who finds that information about the distributive effects of trade does not change overall support for trade. A key difference is that our treatment focuses solely on employment and redistribution, without mixing in consumer-side benefits. Taken together, the evidence from both studies suggests that mentioning compensation alone is unlikely to increase support for trade and may even backfire as we show.

¹⁰[Alfaro et al. \(2023\)](#) implement a series of experiments in which they remove “China” from the information treatments, finding that there are no statistically significant differences between the cases mentioning and not China, which can be explained by the fact that, when primed to think about trade, respondents in their experimental groups (including those in the control group) report that China is one of their main concerns when revealing their preference to restrict trade.

of the Chinese government in our sample of Latin American countries is considerably higher than in the United States, which reduces the role of any geopolitical considerations and rivalry when evaluating the effects of our treatments.¹¹

A direct comparison of the effects of T_1 and T_3 suggests that focusing on exporters' gains from increased trade has a more muted effect than focusing on domestic firms' losses of increasing import competition, which is consistent with individuals responding more to potential negative consequences than they do to positive consequences.¹² A potential explanation for this is loss aversion. Another explanation is that losses of jobs are more tangible, since they affect workers who currently have those jobs, whereas in the case of gains from potential new jobs, it is uncertain who will benefit. Also, the losses and gains to which the treatments refer are in different sectors of the economy (i.e., import-competing vs. export-oriented) and people may care more about one sector than the other.

There is an alternative back-of-the-envelope way to look at the results, however, that suggests that the impact of effects of the *Pro-Trade/Job-Gain* (T_3) treatment may be quite powerful. Recall that 81 percent of individuals in the control group support trade. A treatment effect of 3.6 percentage points suggests that nearly one in every five individuals ($3.6/19 = 0.19$) are swayed by the *Pro-Trade/Job-Gain* (T_3) treatment. This suggests that carefully crafted messages can have a substantial positive impact on attitudes towards trade.

3.2 Treatment effects on trade beliefs

In the previous section, we established that anti-trade messages reduce support for trade and that pro-trade messages increase support only if they are cast in terms of job gains. In this section, we further explore if the treatments affect individual beliefs about the consequences of increased trade on employment and product variety at affordable prices. The idea is that if the treatments are successful in shaping attitudes, they should shift beliefs about the employment losses or gains from trade. Regarding product variety, although the treatments do not explicitly mention variety and prices, the fact that they mention effects on employment may lead respondents to update their beliefs about potential firm entry and exit, and therefore about variety availability as well.

We explore this by estimating equation (2.1) using as the outcomes of interest the

¹¹For example, Gallup data for 2023 show that 15% of US respondents view China favorably, compared with 48.8% in Latin American countries according to Latinobarometro.

¹²In our comparison, we focus on the absolute value of the coefficients to highlight how each of these treatments change support for trade irrespectively of the direction of the effect.

respondents' beliefs about the consequences of trade on employment and variety availability. Table 2 reports the results for this exercise, with each column corresponding to a different belief: (1) for higher employment, (2) lower employment, (3) more variety at affordable prices, and (4) less variety. As can be seen, we find that the treatments emphasizing negative effects on employment (T_1 and T_2) reduce the share of respondents believing that trade leads to higher employment (column (1)) and, conversely, increase beliefs for lower employment (column (2)). We also find that these treatments affect negatively the beliefs about more product variety (column (3)), which suggests that respondents may be associating the decreases in employment mentioned in the narrative with domestic firms exiting the market.

Table 2: Average treatment effects on trade beliefs

| Variables | (1) High Emp. | (2) Low Emp. | (3) More var. | (4) Fewer var. |
|---------------------------------|----------------------|----------------------|----------------------|-------------------|
| Anti-Trade/Job-Loss (T_1) | -0.071*** (0.009) | 0.043*** (0.006) | -0.026*** (0.009) | 0.008 (0.006) |
| Anti-Trade/Compensate (T_2) | -0.068*** (0.009) | 0.037*** (0.006) | -0.028*** (0.009) | 0.008 (0.006) |
| Pro-Trade/Job-Gain (T_3) | 0.041*** (0.008) | -0.024*** (0.005) | -0.016* (0.009) | 0.003 (0.006) |
| Pro-Trade/Job-Loss (T_4) | 0.010 (0.008) | -0.003 (0.006) | -0.004 (0.009) | -0.000 (0.005) |
| Observations | 27,310 | 27,310 | 27,310 | 27,310 |
| R-squared | 0.047 | 0.026 | 0.053 | 0.008 |
| $\beta_1 = \beta_2$ (p-value) | 0.727 | 0.369 | 0.817 | 0.962 |
| $\beta_1 = -\beta_3$ (p-value) | 0.034 | 0.062 | 0.007 | 0.254 |
| $\beta_3 = \beta_4$ (p-value) | 0.000 | 0.000 | 0.159 | 0.546 |
| Country fixed effects | YES | YES | YES | YES |
| Individual controls | YES | YES | YES | YES |

Note: The dependent variable is a dummy equal to one if the individual reports the belief at the top of the column (for example, that trade leads to higher employment in (1)). All columns report the estimates for equation (2.1). Individual controls include age, gender, marital status, education level, and employment status. Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Moving to the pro-trade treatments, we find that the one worded in terms of trade restrictions (T_4) does not lead to any belief updating, which is consistent with the muted effects on trade support previously documented (see Table 1). The treatment highlighting gains for exporters (T_3), however, affects positively the beliefs on increases in employment

(column (1)), negatively the one on decreases in employment (column (2)), and negatively the belief associated with increased product variety. The fact that the pro-trade job-gain treatment has smaller effects on beliefs helps explain why they modestly change support for trade. At the same time, if we consider that only 10 percent of individuals in the control group believe that trade reduces employment, the coefficient for this treatment (-0.024) in column 2, while smaller in magnitude to that corresponding to T_1 (0.043), implies that nearly one in four individuals who hold this belief ($2.4/10=0.24$) are swayed by the positive treatment, when cast in terms of job gains.

3.3 Heterogeneous effects

3.3.1 Individual priors

To what extent do these treatment effects depend on pre-treatment views held by individuals? Are these effects larger when the new information contradicts previously held beliefs? To analyze these issues, we explore heterogeneous effects across two prior views that could influence support for trade, namely (1) if the individual believes experts have a positive, negative, or mixed view of trade and (2) if she thinks relations with foreign countries have a positive, negative, or mixed effect on her country's culture. The results of these exercises can be found in Figures 1 and 2, respectively. In particular, we report the average treatment effects depending on the individual's prior views.

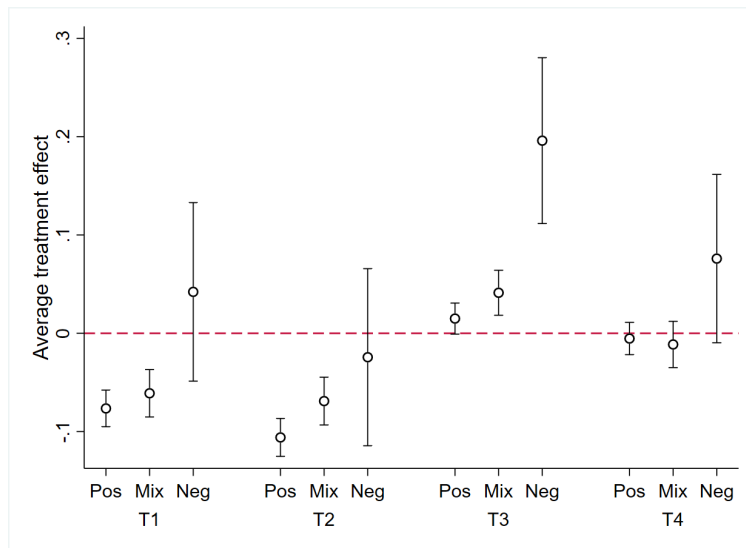
Starting with the priors about expert opinions on trade (see Figure 1), we find that individuals with positive or mixed priors are more sensitive to the treatments emphasizing the negative employment effects of trade, T_1 (Anti-Trade/Job Loss) and T_2 (Anti-Trade/Compensate), with the treatment effects being negative and statistically significant for individuals with positive and mixed views and small and imprecise for those with negative prior views. In contrast, the results for T_3 (Pro-Trade/Job Gain) and, to a lesser degree, for T_4 (Pro-Trade/Job-Loss) suggest that positive treatments are more effective for individuals with negative prior views on trade. As we mentioned in the Introduction, this exercise suggests that both positive and negative messages can indeed shift prior views and lead to belief updating away from individuals' priors.¹³

This result may seem to contradict existing evidence that individuals tend to engage

¹³Another possible interpretation of our results with T_1 and T_2 is that they may reflect "distrust of experts": Those who believe that most experts have a positive view of trade may have a stronger distrust of these expert opinions and, therefore, they may voice a lower degree of trade support when the treatments make the issue salient. Even though this explanation can be at play in our setting, it is at odds with the fact that support for trade is the largest among those who believe that most experts have a positive view of trade (see Tables B.3 and 4) and that we find similar results with our variable on perceived impacts on culture of interactions with foreign countries.

in motivated reasoning (Taber and Lodge, 2006). Our results do not imply that cognitive biases such as motivated reasoning, confirmation bias or cognitive dissonance are not at play. It is possible, for example, that those with negative priors are in fact receptive to the negative treatment, and thus are even more opposed to increased trade than they were before the treatment. But since our survey does not capture the strength of the attitudes towards trade, and only captures the direction (that is, whether individuals are in favor of expanding or restricting trade), the receptiveness of the trade skeptics to the negative treatments, or the believers to the positive treatments, is not well captured by the data. Including the strength of the attitudes towards trade in these surveys would be a good way to assess this issue in future research.

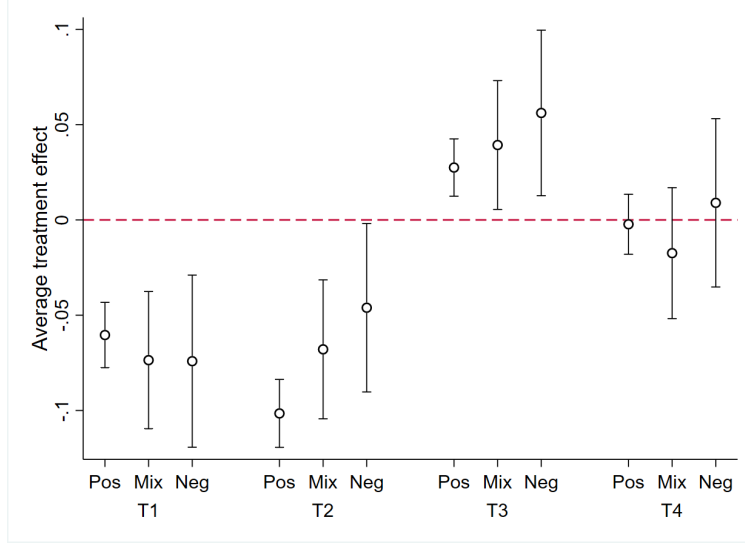
Figure 1: Trade support and experts' views on trade



Note: The figure plots the average effect for each of the four treatments depending on whether the individual believes experts have positive (Pos), negative (Neg), or mixed (Mix) views on trade. The treatments are: Anti-Trade/Job-Loss (T_1), Anti-Trade/Compensate (T_2), Pro-Trade/Job-Gain (T_3), and Pro-Trade/Job-Loss (T_4). The mixed views include individuals who responded “don’t know” to the question. The estimates come from a specification with country fixed effects, order effects, and individual controls (age, gender, marital status, education level, and employment status). Ranges around the estimates correspond to the 95% confidence intervals.

Moving to the results according to the perceived impact on culture of interactions with foreign countries (see Figure 2), we find that the effects of T_2 (Anti-Trade/Compensate) are weakly increasing in individual’ priors, with the effect being more negative for those with positive views. The estimates for T_3 (Pro-Trade/Job Gain), on the contrary, suggest that positive treatments are more effective among those with negative views. Overall, although weaker, these results are also consistent with positive and negative treatments changing the views of skeptics and believers, respectively.

Figure 2: Trade support and cultural influence of foreign countries



Note: The figure plots the average effect for each of the four treatments depending on whether the individual thinks relations with foreign countries have a positive (Pos), negative (Neg), or mixed (Mix) influence on her country's culture. The treatments are: Anti-Trade/Job-Loss (T_1), Anti-Trade/Compensate (T_2), Pro-Trade/Job-Gain (T_3), and Pro-Trade/Job-Loss (T_4). The mixed views include individuals who responded don't know to the question. The estimates come from a specification with country fixed effects, order effects, and individual controls (age, gender, marital status, education level, and employment status). Ranges around the estimates correspond to the 95% confidence intervals.

Using information on individual beliefs about the consequences of trade, we explore whether the treatment effects for the beliefs vary with prior views on trade. To this end, we replicate Figure 1 for each of the beliefs included in the survey: Higher employment (panel a), lower employment (panel b), more varieties (panel c), and fewer varieties (panel d). As seen in Figure B.1 in the Appendix, we find that individuals with positive or mixed (negative) priors change more strongly their beliefs of the effects of trade on employment to the treatments T_1 and T_2 (T_3 and T_4), although the effects are less precise than before. The results for the beliefs associated with the number and price of varieties do not show any clear patterns. These results then confirm that our treatments are effective in changing individuals' views on trade, especially those associated with the effect of trade on employment. We also find a pattern suggestive of Bayesian updating in which information contradicting individuals' priors leads to larger changes in trade support and beliefs (Benjamin, 2019).¹⁴

¹⁴We also replicate Figure 2 for each of the beliefs, with the estimates being much less precisely estimated (see Figure B.2 in the Appendix).

3.3.2 Individual characteristics

We move next to estimate heterogeneous effects for the age and education of the respondent. As can be seen in Table B.5 in the Appendix, we find that age attenuates the effect of T_2 (Anti-Trade/Compensate) and that individuals with a college education react more strongly to the negative treatments (T_1 and T_2). We do not find effects for other characteristics such as gender or employment status (results available upon request).

The results regarding education deserve further discussion (for a more detailed analysis, see [Rodríguez Chatruc et al. \(2021\)](#)). One might expect that individuals with higher education would be less responsive to framing. However, there are different channels through which higher education may affect support for trade (see Table 3). The first is economic interest. Stolper-Samuelson would suggest that, in economies where skilled labor is scarce, like the ones in our survey, more educated individuals lose from increased trade. Thus, through this channel, education would have a negative effect on support for trade. However, education may lead to stronger support for trade through two other channels. First, higher education should be correlated with more knowledge regarding the impact of trade on the economy (i.e., *knowledge channel*). Second, higher education is typically associated with a more open, cosmopolitan view of the world, which would make educated individuals more open to foreign goods and ideas (i.e., *culture channel*). In fact, our data suggests that there is a positive and significant correlation between higher education and the prior views used in the previous subsection.¹⁵

Table 3: Expected impact of higher education on attitudes toward trade

| | Self-interest (Stolper-Samuelson) | Knowledge | Culture |
|---------------|--------------------------------------|-----------|---------|
| More educated | - | + | + |
| Less educated | + | - | - |

The fact that the direct effect of higher education on support for trade is positive suggests that the last two channels override the impact of the first. But what about the interaction with the negative treatments T_1 and T_2 ? Our conjecture is that the negative treatments may reduce support relatively more on those who are more likely to be affected (which according to Stolper Samuelson should be the educated). But, in addition, the negative treatment may increase the salience of the economic interest channel vis-

¹⁵The share of individuals believing that experts have a positive view on trade goes from 73 percent for those without formal education to 83 percent for the college graduates. The same numbers for the view on cultural influence are 55 and 74 percent, respectively. Computing the Pearson χ^2 on the contingency tables, we reject the null of independence for the experts views ($\chi^2 = 158.7$, p-value<0.001) and cultural influence ($\chi^2 = 384.1$, p-value<0.001).

à-vis the knowledge and the culture channels. If this is so, it will have a particularly strong impact on the educated, who would lose with increased trade through this channel. Thus, even though they are highly educated, they may exhibit greater responsiveness to the negative treatments, as observed in Table B.5.

3.3.3 Country characteristics

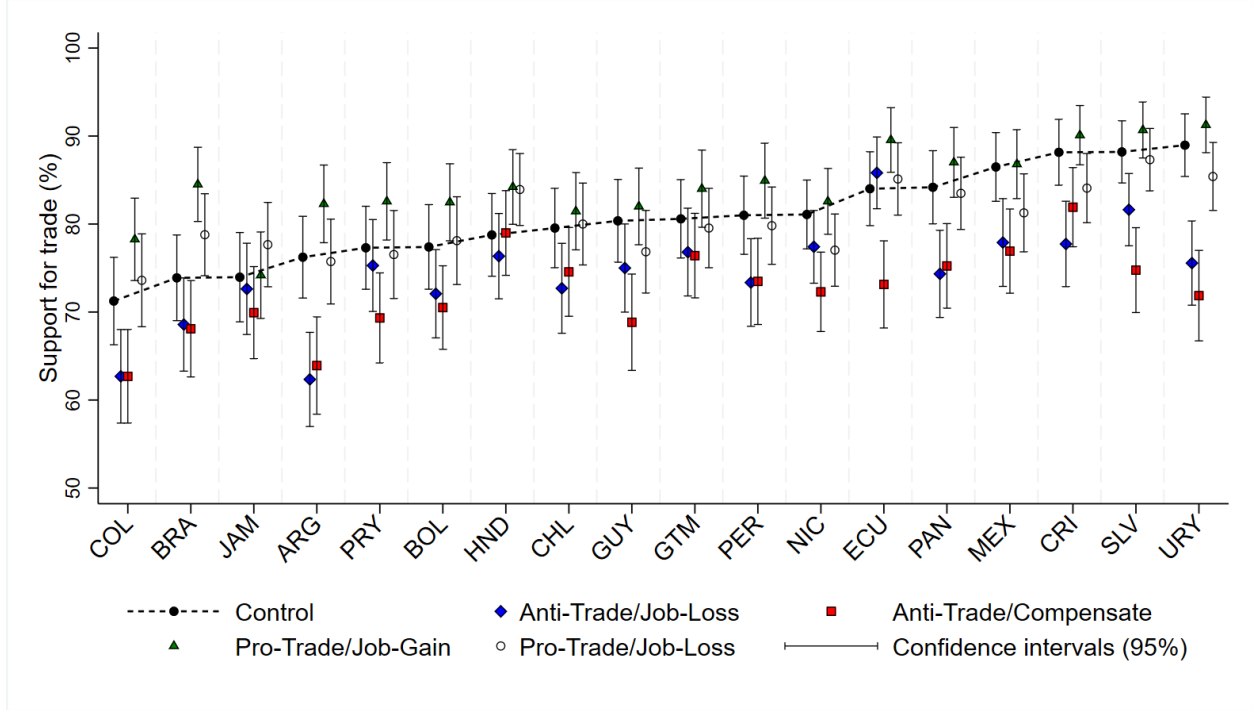
Since we are working with a multi-country sample, it is natural to explore if treatment effects vary across countries and if they are influenced by countries' circumstances. Figure 3 shows baseline support and treatment effects for each of the 18 countries in our sample. Baseline support in the control group ranges from 71% in Colombia to 89% in Uruguay. The anti-trade treatments (T_1 and T_2) have a negative impact in almost all the countries, except for Ecuador (for the case of T_1) and Honduras (for the case of T_2). The point estimates, however, are not in all cases statistically significant. In most cases, the impact of T_2 is similar or more negative than the impact of T_1 , except for Honduras, Argentina, Chile, and Costa Rica, where the possibility of compensation ameliorates the negative impact of job losses. Regarding the pro-trade treatments, T_3 increases support for trade in almost all countries except for Jamaica and Mexico, where support remains relatively stable. The point estimates, however, are not in all cases statistically significant. Lastly, T_4 increases support for trade in a few countries (Colombia, Brazil, Jamaica, and Honduras) but decreases or does not change it in most countries.

How do the circumstances of countries influence the impact of treatments? We explore this issue in Table B.6 in the Appendix by interacting the treatment indicators with variables measuring recent accelerations in imports and total trade and recent changes in unemployment. On the one hand, recent trade accelerations seem to partially offset the negative impact of the *Anti-Trade/Job-Loss* treatment (T_1) and they have a close to zero influence on the effect of the other treatments, which is consistent with messaging on the negative employment effects of trade being less informative in countries where trade has been increasing.¹⁶ On the other hand, recent increases in unemployment are associated with a more negative impact of T_1 , which suggests that information stressing the negative effect of trade on employment can be more effective in countries with increasing unemployment, where these issues may be particularly salient.

We also interact the treatment dummies with indicators for trust in government and

¹⁶In results not reported and available upon request, we do not find evidence of heterogeneous effects with respect to export accelerations, which suggests that our results on total trade are mainly driven by imports. We also do not find heterogeneous effects when we used the export level instead of export accelerations.

Figure 3: Trade support by experimental group and country



Note: The figure plots the average support for trade by country for each of the five experimental groups: Control (C), Anti-Trade/Job-Loss (T_1), Anti-Trade/Compensate (T_2), Pro-Trade/Job-Gain (T_3), and Pro-Trade/Job-Loss (T_4). Ranges around the conditional means correspond to the 95% confidence intervals.

support for trade at the country level (using information in both cases only for the control group). As can be seen in Table B.7 in the Appendix, we find that the effect of T_2 is stronger in countries where trust in the government is higher. This result seems counterintuitive. More research is needed to understand the role of trust for the government on shaping trade support, especially in the case where compensation to those who lose is involved. For trade support, our results suggest that the effects of all treatments are more negative in countries with higher support. The fact that, when support for trade is already high, the effects are stronger for the negative treatment (T_1 and T_2) and weaker for the positive ones (T_3 and T_4) is consistent with our previous finding that the treatment effects are stronger for individuals predisposed against the information presented in the treatment.

3.4 Robustness of baseline estimates

Our results still hold after a series of robustness checks. First, we checked that our baseline estimates in Table 1 are not driven by a single country. To show this, we run the

same specification (2.1) but excluding one country at a time. Figure B.3 shows that the effects remain qualitatively similar and that the point estimates of T_1 , T_2 , and T_3 are still statistically significant.

Second, we evaluate if our results are robust to estimating our baseline specification using a Probit model instead of a linear probability model. Table B.8 shows that the marginal effects of the Probit model are similar in magnitude (and statistical significance) to our baseline estimates.

Third, we checked our results are robust to how we treat non-responses. In our baseline specification, we recode non-responses in the dependent variable as zeroes (i.e., no support for increasing trade). In Table B.9, we show the results of the baseline specification when excluding non-responses from the sample. Point estimates are somewhat smaller in magnitude but qualitatively similar and statistically significant.

Finally, we explore whether our estimates for the specification (2.1) are affected by the contamination bias described in Goldsmith-Pinkham et al. (2024). In particular, given that we have more than one treatment, using a linear model can lead to biased estimates if there is variation in the propensity score across units, which can be the case in a stratified RCT as ours. To address this concern and following Goldsmith-Pinkham et al. (2024), Table B.10 shows the results of estimating a version of (2.1) in which each treatment arm is compared individually with the control group. The point estimates from this exercise are almost identical to what we find when estimating the effects of interest with a joint linear model.

4 Mechanisms

Above we established that our treatments affect both attitudes towards trade as well as beliefs about the consequences of trade in terms of employment and product variety. Our interpretation of these results was that (part of) the change in trade support following the treatments came from belief updating by the respondents, that is, that beliefs mediated the effect of the treatments. Here, we formally explore this idea.

As a first attempt to understand the role of beliefs in support for trade, we estimate a specification in which we explain the trade support with our beliefs indicators. The results for this exercise are in Table 4, with columns (1)-(2) using information for all the respondents irrespective of their experimental group and (3)-(4) restricting the sample to the control group. Odd columns do not add controls and the even ones add country fixed effects, socioeconomic control, and order effects. As can be seen, beliefs are strongly correlated with support for trade, with the coefficients for the beliefs associated with

employment being the largest. For example, the average trade support for those believing that trade increases employment is 16.9 percentage points higher than for those that do not hold that belief (see column 4). Importantly, these results are robust to using only the control group and, therefore, they are not driven by the treatments. The fact that coefficients are larger for beliefs on employment, rather than product variety, suggests that, in forming their attitudes towards trade, individuals care more about employment than product variety. This justifies the emphasis of this paper on the impact of trade policy on labor market outcomes, in contrast to [Rodríguez Chatruc et al. \(2021\)](#), which focused on both dimensions.¹⁷

Taking together the estimates in Tables 1, 2, and 4, suggest that beliefs may be mediating the effects of the treatment on trade support. But by how much? To answer this question, we implement a mediation analysis ([Imai et al., 2010a,b](#); [Celli, 2022](#)) in which we quantify the role of beliefs in the observed effect of the treatments. The mediation analysis we use relies on the sequential ignorability assumption ([Imai et al., 2010b](#)): First, the treatment should be independent of the potential outcomes and mediators conditional on the control variables. Second, the mediator should be independent of the potential outcomes conditional on the control variables and treatment. This is, after accounting for the individual characteristics and the treatment, the mediator (beliefs, in our case) should be as good as random with respect to the outcome. In our application, the first ignorability assumption follows from the randomization. The second one is stronger and, therefore, we implement the mediation analysis using the full set of controls to mitigate the possibility of omitted variable bias. To simplify the analysis, we focus on the three treatments with significant effects on trade support, this is, T_1 , T_2 , and T_3 . We also only add as mediators the belief that trade leads to higher or lower employment, respectively, which turned out to be the strongest predictors of trade support in Table 4.

The results of the mediation analysis are in Table 5, with Panel A showing the results for T_1 (Anti-Trade/Job-Loss), B for T_2 (Anti-Trade/Compensate), and C for T_3 (Pro-Trade/Job Gain). Columns (1)-(3) show the results when we use the belief on higher employment as mediator and (4)-(6) when we use lower employment instead. The Average Causal Mediation Effect (ACME) in the first row of each panel measures the effect of the treatment operating through the mediator, which are the beliefs that trade increases or decreases employment. The direct effect corresponds to the effect that goes directly from the treatment to trade support. The ACME and direct effect add up to the total effect, which is comparable to the estimates in Table 1, column (5). The last row in each panel

¹⁷Table 4 also shows that the pre-treatment views held by individuals matter for their support for trade, with the ones associated with the experts' views having stronger explanatory power.

Table 4: Support for trade and beliefs

| Variables | (1) Support | (2) Support | (3) Support | (4) Support |
|--------------------------------|----------------------|----------------------|----------------------|----------------------|
| Higher employment | 0.191*** (0.007) | 0.187*** (0.007) | 0.174*** (0.016) | 0.169*** (0.016) |
| Low employment | -0.161*** (0.011) | -0.157*** (0.011) | -0.129*** (0.026) | -0.119*** (0.026) |
| More varieties | 0.123*** (0.006) | 0.114*** (0.006) | 0.129*** (0.014) | 0.115*** (0.013) |
| Fewer varieties | 0.022** (0.010) | 0.015 (0.010) | 0.017 (0.023) | 0.010 (0.023) |
| Positive cultural influence | 0.085*** (0.006) | 0.067*** (0.006) | 0.085*** (0.013) | 0.064*** (0.013) |
| Negative cultural influence | 0.007 (0.009) | 0.003 (0.009) | -0.007 (0.019) | -0.010 (0.019) |
| Positive view experts | 0.072*** (0.005) | 0.060*** (0.005) | 0.087*** (0.010) | 0.072*** (0.010) |
| Negative view experts | -0.032** (0.014) | -0.031** (0.013) | -0.091*** (0.030) | -0.094*** (0.029) |
| Observations | 27,310 | 27,310 | 5,502 | 5,502 |
| R-squared | 0.175 | 0.189 | 0.180 | 0.204 |
| Higher versus lower employment | 0.070 | 0.064 | 0.217 | 0.168 |
| More versus fewer varieties | 0.000 | 0.000 | 0.000 | 0.000 |
| Country fixed effects | NO | YES | NO | YES |
| Individual controls | NO | YES | NO | YES |
| Order effects | NO | YES | NO | YES |
| Sample | All | All | Ctrl Grp | Ctrl Grp |

Note: The dependent variable is a dummy equal to one if the individual supports increasing trade. All columns report the results of a linear regression where the support for trade dummy is explained by the beliefs indicators. Individual controls include age, gender, marital status, education level, and employment status. Order effects correspond to a dummy if the first answer option for the support-for-trade question was “increasing trade”. Columns (1)-(2) use data for all experimental groups and (3)-(4) only the ones in the control group. Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

shows how much of the total effect of the treatment can be attributed to the mediator. As can be seen, we find that changes in the belief that trade increases (decreases) employment explains 32.1% (23%) of the effect of T_1 , 21.8% (12.9%) of T_2 , and 32.2% (22.1%) of T_3 , with all these shares being statistically significant at conventional levels. In sum, we find that belief updating plays an important role in explaining the changes in trade

support following the different treatments.

Considering both beliefs about employment together (increase and decrease), the mediated effect amounts to approximately 34-55% of the total effect.¹⁸ What is the direct effect reflecting? Several comments are due here. First, the direct effect could conflate the influence of social desirability bias in answering the question about trade preferences, this is, when people are told there will be changes in employment they may respond in order to please the interviewer, while the question about the impact of trade on some economic variable is more technical, does not contain an embedded framing, and therefore, could be less prone to being affected by social desirability. Second, the framing in the trade preference questions is sector-specific whereas the belief question is general, so the direct effect may be capturing how much individuals care about a specific sector. Third, when we compare the direct effects of T_1 and T_2 it makes sense that mentioning compensation increases the direct effect because people may like or dislike compensations and this is unrelated with the beliefs on the employment effects. Fourth, the mediated effect could be even larger than what we capture since our treatments might be shifting the perceived intensity of the changes in employment without changing the sign (i.e., decrease or increase) and this may be captured by the direct effect.

5 Conclusions

Economic theory suggests that international trade enhances overall economic welfare by enabling countries to specialize in producing goods where they have a comparative advantage, thereby increasing total output. Despite this, the notion that trade improves welfare is not always mirrored in actual trade policy. In Latin America, for instance, although tariffs and other trade barriers have significantly decreased over the past 30 years, substantial obstacles to trade still persist (Moreira et al., 2019). This can be attributed to the fact that while trade liberalization brings about aggregate welfare gains, it also creates both winners and losers. Those adversely affected by liberalization may resist such policies and lobby for ongoing protection. Ultimately, differing preferences on trade policy are settled through the political process. But pro- and anti-trade messages by actors involved in the trade policymaking process may potentially impact individual's preferences and, through them, policy outcomes.

¹⁸Given that we implement the mediator analysis for each of the beliefs separately, we compute this total effects by adding the percent mediated for both beliefs (T_1 : $32.1 + 23 = 55.1$; T_2 : $21.8 + 12.9 = 34.7$; T_3 : $32.2 + 22.1 = 54.3$). The assumption behind this computation is that the treatments change beliefs one step at a time (for example, from an increase in employment to a mixed effect or from a mixed effect to a decrease).

Table 5: Mediation analysis

| Effect | Higher employment | | | Lower employment | | |
|--|-------------------|--------|--------|------------------|--------|--------|
| | Mean | 95% CI | | Mean | 95% CI | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Panel A. Anti-Trade/Job-Loss (T_1) | | | | | | |
| Causal Mediation Effect | -0.021 | -0.026 | -0.016 | -0.015 | -0.020 | -0.011 |
| Direct Effect | -0.044 | -0.057 | -0.030 | -0.050 | -0.063 | -0.034 |
| Total Effect | -0.065 | -0.079 | -0.048 | -0.065 | -0.076 | -0.050 |
| Percent mediated | 0.321 | 0.268 | 0.438 | 0.230 | 0.198 | 0.300 |
| Panel B. Anti-Trade/Compensate (T_2) | | | | | | |
| Causal Mediation Effect | -0.019 | -0.023 | -0.014 | -0.011 | -0.015 | -0.007 |
| Direct Effect | -0.066 | -0.079 | -0.050 | -0.074 | -0.087 | -0.058 |
| Total Effect | -0.085 | -0.099 | -0.068 | -0.085 | -0.096 | -0.069 |
| Percent mediated | 0.218 | 0.200 | 0.276 | 0.129 | 0.114 | 0.159 |
| Panel C. Pro-Trade/Job-Gain (T_3) | | | | | | |
| Causal Mediation Effect | 0.011 | 0.007 | 0.015 | 0.008 | 0.004 | 0.011 |
| Direct Effect | 0.024 | 0.012 | 0.038 | 0.028 | 0.016 | 0.042 |
| Total Effect | 0.035 | 0.022 | 0.049 | 0.035 | 0.024 | 0.049 |
| Percent mediated | 0.322 | 0.225 | 0.505 | 0.221 | 0.158 | 0.322 |

Note: The table shows the results of individual mediation analysis for T_1 , T_2 , and T_3 in Panel A, B, and C, respectively. The mediator in columns (1)-(3) is the belief that trade leads to higher employment and in columns (4)-(5) is the belief that trade leads to lower employment. In all the cases, we add the full set of controls, which includes country fixed effects, individual controls (age, gender, marital status, education level, and employment status), and order effects (dummy if the first answer option for the support-for-trade question was “increasing trade”). CI: Confidence intervals.

In this paper, we conducted a large-scale survey experiment in nationally representative samples of 18 Latin American countries to study how people’s attitudes and beliefs change in response to information that highlights potential employment losses, to information that highlights employment gains, and to information that stresses the possibility of compensation to those displaced by trade. We found that anti-trade information reduces support for trade even if compensation to losers is mentioned and that pro-trade messages increase support only if they are worded in terms of job gains. Information about the negative consequences of restricting trade for exporters’ employment does not

affect support. In line with previous literature, information about the negative employment consequences for import-competing sectors significantly reduces support for trade. Contrary to our expectations, mentioning the possibility of compensating the workers displaced by foreign competition significantly increases the negative effect of the previous treatment. Finally, information about the positive effects of trade on exporters' employment increases support for trade but to a smaller degree than the negative effect of information regarding domestic firms' losses from import competition.

Our results underline the importance of understanding how individual trade preferences are formed. This knowledge can guide communication by policy-makers during trade-liberalization processes. Although information about employment gains in exporting sectors is not as effective (in magnitude) as information about employment losses, its impact is still positive in increasing support, particularly among the pre-treatment skeptics. This is useful, since we know from previous literature that positive information about prices and product variety does not have the desired effect. Our results suggest that free-trade advocates should also be cautious not to mention the possibility of compensating displaced workers since this can backfire.

Finally, our results on government compensation suggest that more research is needed on the connection between compensation mechanisms and trade support. Intuitively, one may think that if information about employment losses reduces trade support, then mentioning the possibility of compensation could ameliorate this negative response. However, the opposite happens in our sample of 18 Latin American countries. Several mechanisms could be at play: it could be that individuals are concerned about having to pay more taxes to compensate those displaced workers, or that they are uncertain about how the government is going to compensate them. Future research could shed light on this issue by implementing treatments along the lines of [Di Tella and Rodrik \(2020\)](#) distinguishing between different types of government action and eliciting preferences for compensation mechanisms together with trade support.

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A Details

A.1 Wording of questions of interest

The exact wording in Spanish for the trade support questions was:

- *Control group (C)*: [País] compra y vende productos a otros países. ¿Cuál es su opinión sobre el comercio exterior entre [país] y otros países?
- *Anti-Trade/Job-Loss (T_1)*: [País] compra y vende productos a otros países. Expandir el comercio exterior podría reducir los empleos en las empresas que compiten con productos importados. ¿Cuál es su opinión sobre el comercio exterior entre [país] y otros países?
- *Anti-Trade/Compensate (T_2)*: [País] compra y vende productos a otros países. Expandir el comercio exterior podría reducir los empleos en las empresas que compiten con productos importados. ¿Cuál sería su opinión del comercio exterior entre [país] y otros países si el gobierno compensara a los trabajadores afectados?
- *Pro-Trade/Job-Gain (T_3)*: [País] compra y vende productos a otros países. Expandir el comercio exterior podría aumentar los empleos en las empresas que venden sus productos a otros países. ¿Cuál es su opinión del comercio exterior entre [país] y otros países?
- *Pro-Trade/Job-Loss (T_4)*: [País] compra y vende productos a otros países. Restringir el comercio exterior podría reducir los empleos en las empresas que venden productos a otros países. ¿Cuál es su opinión sobre el comercio exterior entre [País] y otros países?

The answer options were in all cases “Apoya expandir el comercio” and “Apoya restringir el comercio,” with their order being randomized. The wording for the questions about the beliefs on the consequences of trade was the following:

- *Beliefs*: En su opinión, ¿qué consecuencias tendría la expansión del comercio de [País] con otros países?

With the question on employment having the answer options “Un aumento del empleo,” “Una caída del empleo,” and “No habría cambios en el empleo”. The one on varieties has the options “Una mayor variedad de productos a precios accesibles,” “Una menor variedad de productos a precios accesibles,” and “No habría cambios en los productos

disponibles.” As in the treatment questions, the order of the answer options was randomized.

Finally, the questions regarding the views on trade have the following wording:

- *Experts’ views on trade*: ¿Qué cree usted que los expertos en economía piensan acerca del comercio entre países?
- *Cultural influence*: ¿Qué influencia cree que tiene para la cultura de [País], que haya mayor contacto con ideas, personas y productos de otros países?

The answer options for the former were: “La mayoría cree que el comercio es en general beneficioso para la economía de un país,” “Algunos creen que el comercio es beneficioso, otros que el comercio es perjudicial para la economía de un país,” and “La mayoría cree que el comercio es en general perjudicial para la economía de un país.” For the latter the options were: “Influencia positiva,” “Influencia negativa,” and “No tiene influencia.”

B Additional results

Table B.1: Sample size by treatment arm and country

| | C | T_1 | T_2 | T_3 | T_4 | All |
|-------------|------|-------|-------|-------|-------|-------|
| Argentina | 324 | 316 | 291 | 288 | 305 | 1524 |
| Bolivia | 292 | 308 | 356 | 291 | 265 | 1512 |
| Brazil | 314 | 296 | 279 | 284 | 297 | 1470 |
| Chile | 308 | 293 | 287 | 302 | 285 | 1475 |
| Colombia | 320 | 319 | 319 | 299 | 269 | 1526 |
| Costa Rica | 287 | 283 | 282 | 303 | 333 | 1488 |
| Ecuador | 294 | 282 | 309 | 268 | 289 | 1442 |
| El Salvador | 322 | 343 | 313 | 322 | 339 | 1639 |
| Guatemala | 304 | 276 | 301 | 269 | 308 | 1458 |
| Guyana | 275 | 288 | 276 | 300 | 311 | 1450 |
| Honduras | 292 | 296 | 276 | 285 | 311 | 1460 |
| Jamaica | 288 | 285 | 296 | 306 | 291 | 1466 |
| Nicaragua | 386 | 394 | 379 | 396 | 405 | 1960 |
| Mexico | 296 | 267 | 299 | 288 | 299 | 1449 |
| Panama | 297 | 300 | 311 | 277 | 315 | 1500 |
| Paraguay | 304 | 263 | 313 | 287 | 277 | 1444 |
| Peru | 300 | 304 | 313 | 272 | 322 | 1511 |
| Uruguay | 299 | 311 | 295 | 309 | 322 | 1536 |
| Total | 5502 | 5424 | 5495 | 5346 | 5543 | 27310 |

Note: The table shows the number of observations for each of the experimental group and country. The experimental groups are: Control (C), Anti-Trade/Job-Loss (T_1), Anti-Trade/Compensate (T_2), Pro-Trade/Job-Gain (T_3), and Pro-Trade/Job-Loss (T_4).

Table B.2: Descriptive statistics for the control group

| | Obs. | Mean | SD | Min. | Max. |
|---|------|------|------|------|------|
| <i>Panel A: Trade supports and beliefs</i> | | | | | |
| Support for trade | 5502 | 0.81 | 0.40 | 0.00 | 1.00 |
| Higher employment | 5502 | 0.73 | 0.44 | 0.00 | 1.00 |
| Low employment | 5502 | 0.10 | 0.30 | 0.00 | 1.00 |
| More varieties | 5502 | 0.65 | 0.48 | 0.00 | 1.00 |
| Fewer varieties | 5502 | 0.09 | 0.29 | 0.00 | 1.00 |
| <i>Panel B: Socioeconomic characteristics</i> | | | | | |
| Male | 5502 | 0.5 | 0.5 | 0.0 | 1.0 |
| Age | 5502 | 39.0 | 14.8 | 16.0 | 99.0 |
| Married | 5502 | 0.5 | 0.5 | 0.0 | 1.0 |
| Education: Primary | 5502 | 0.2 | 0.4 | 0.0 | 1.0 |
| Education: Secondary | 5502 | 0.4 | 0.5 | 0.0 | 1.0 |
| Education: Tertiary | 5502 | 0.4 | 0.5 | 0.0 | 1.0 |
| Employed | 5502 | 0.5 | 0.5 | 0.0 | 1.0 |
| <i>Panel C: Trust and views on trade</i> | | | | | |
| Trust in national government | 5364 | 0.45 | 0.50 | 0.00 | 1.00 |
| Trust in community | 5502 | 0.56 | 0.50 | 0.00 | 1.00 |
| Positive cultural influence | 5502 | 0.62 | 0.48 | 0.00 | 1.00 |
| Negative cultural influence | 5502 | 0.14 | 0.35 | 0.00 | 1.00 |
| Positive view experts | 5502 | 0.49 | 0.50 | 0.00 | 1.00 |
| Negative view experts | 5502 | 0.04 | 0.02 | 0.00 | 1.00 |

Note: The table shows descriptive statistics of several key variables for the control group.

Table B.3: Balance test across treatment arms

| Variable | (1) C | (2) T_1 | (3) T_2 | (4) T_3 | (5) T_4 |
|-----------------------------------|----------|--------------|--------------|--------------|--------------|
| Male | 0.478 | 0.491 | 0.472 | 0.484 | 0.475 |
| Age | 39.0 | 39.5* | 38.8 | 38.7 | 39.2 |
| Married | 0.514 | 0.521 | 0.502 | 0.499 | 0.523 |
| Education: Primary | 0.171 | 0.171 | 0.165 | 0.169 | 0.182 |
| Education: Secondary | 0.413 | 0.411 | 0.401 | 0.41 | 0.395* |
| Education: Tertiary | 0.390 | 0.393 | 0.407* | 0.397 | 0.397 |
| Employed | 0.508 | 0.524* | 0.51 | 0.51 | 0.507 |
| Trust in national government | 0.457 | 0.477** | 0.465 | 0.46 | 0.472* |
| Trust in community | 0.555 | 0.567 | 0.576** | 0.558 | 0.556 |
| Positive influence on culture | 0.622 | 0.628 | 0.633 | 0.633 | 0.622 |
| Negative influence on culture | 0.141 | 0.148 | 0.156** | 0.137 | 0.141 |
| Positive view of trade by experts | 0.486 | 0.485 | 0.489 | 0.493 | 0.49 |
| Negative view of trade by experts | 0.042 | 0.035** | 0.038 | 0.035** | 0.041 |

Note: The table shows the conditional mean for each of the experimental groups, obtained using a linear model with country fixed effects and fitted for each variable separately. The experimental groups are: Control (C), Anti-Trade/Job-Loss (T_1), Anti-Trade/Compensate (T_2), Pro-Trade/Job-Gain (T_3), and Pro-Trade/Job-Loss (T_4). The p-values for the difference between the means for each of the treatment groups and the control group are computed using robust standard errors. *** p<0.01, ** p<0.05, * p<0.1. The number of observations ranges from 27,168 to 27,881.

Table B.4: Average treatment effects including individual-level controls

| VARIABLES | (1) Support | (2) High E. | (3) Low E. | (4) More var. | (5) Fewer var. |
|---------------------------------|----------------------|----------------------|----------------------|----------------------|-------------------|
| Anti-Trade/Job-Loss (T_1) | -0.067*** (0.008) | -0.071*** (0.009) | 0.045*** (0.006) | -0.026*** (0.009) | 0.008 (0.006) |
| Anti-Trade/Compensate (T_2) | -0.089*** (0.008) | -0.070*** (0.009) | 0.038*** (0.006) | -0.030*** (0.009) | 0.008 (0.006) |
| Pro-Trade/Job-Gain (T_3) | 0.032*** (0.007) | 0.039*** (0.008) | -0.023*** (0.005) | -0.018** (0.009) | 0.004 (0.006) |
| Pro-Trade/Job-Loss (T_4) | -0.007 (0.007) | 0.009 (0.008) | -0.001 (0.006) | -0.005 (0.009) | -0.000 (0.006) |
| Observations | 26,651 | 26,651 | 26,651 | 26,651 | 26,651 |
| R-squared | 0.092 | 0.079 | 0.040 | 0.094 | 0.013 |
| $\beta_1 = \beta_2$ (p-value) | 0.009 | 0.934 | 0.312 | 0.694 | 0.899 |
| $\beta_1 = -\beta_3$ (p-value) | 0.006 | 0.029 | 0.029 | 0.003 | 0.205 |
| $\beta_3 = \beta_4$ (p-value) | 0.000 | 0.000 | 0.000 | 0.138 | 0.436 |
| Country fixed effects | YES | YES | YES | YES | YES |
| Full individual controls | YES | YES | YES | YES | YES |
| Order effects | YES | YES | YES | YES | YES |

Note: The dependent variables are dummies equal to one if the individual supports increasing trade and for each of the beliefs of the consequences of trade. All columns report the estimates for equation (2.1). Individual controls include age, gender, marital status, education level, employment status, trust in national government and community, and ex-ante views on trade. See Table B.2 for a description of the different controls (panels B and C). Order effects correspond to a dummy if the first answer option for the support-for-trade question was “increasing trade.” Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table B.5: Heterogeneous effects: Individual characteristics

| VARIABLES | (1) Support | (2) Support |
|---------------------------------|----------------------|----------------------|
| Anti-Trade/Job-Loss (T_1) | -0.056*** (0.022) | -0.052*** (0.011) |
| Anti-Trade/Compensate (T_2) | -0.132*** (0.022) | -0.073*** (0.011) |
| Pro-Trade/Job-Gain (T_3) | 0.016 (0.019) | 0.040*** (0.010) |
| Pro-Trade/Job-Loss (T_4) | -0.015 (0.021) | -0.007 (0.010) |
| T_1 x age | -0.000 (0.001) | |
| T_2 x age | 0.001** (0.001) | |
| T_3 x age | 0.001 (0.000) | |
| T_4 x age | 0.000 (0.001) | |
| T_1 x higher education | | -0.033** (0.015) |
| T_2 x higher education | | -0.030* (0.016) |
| T_3 x higher education | | -0.012 (0.014) |
| T_4 x higher education | | 0.006 (0.014) |
| Observations | 27,310 | 27,310 |
| R-squared | 0.059 | 0.059 |
| Country FE | YES | YES |
| Individual controls | YES | YES |
| Order effects | YES | YES |

Note: The dependent variable is a dummy equal to one if the individual supports increasing trade. All columns include as controls individual characteristics (age, gender, marital status, education level, and employment status), order effects, and country fixed effects. Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table B.6: Heterogeneous effects: Country characteristics

| VARIABLES | (1) Support | (2) Support | (3) Support |
|-------------------------------------|----------------------|----------------------|----------------------|
| Anti-Trade/Job-Loss (T_1) | -0.065*** (0.008) | -0.065*** (0.008) | -0.064*** (0.008) |
| Anti-Trade/Compensate (T_2) | -0.085*** (0.008) | -0.085*** (0.008) | -0.084*** (0.008) |
| Pro-Trade/Job-Gain (T_3) | 0.035*** (0.007) | 0.035*** (0.007) | 0.035*** (0.007) |
| Pro-Trade/Job-Loss (T_4) | -0.004 (0.007) | -0.004 (0.007) | -0.004 (0.007) |
| T_1 x imports acceleration | 0.015* (0.008) | | |
| T_2 x imports acceleration | -0.004 (0.009) | | |
| T_3 x imports acceleration | -0.006 (0.008) | | |
| T_4 x imports acceleration | -0.005 (0.008) | | |
| T_1 x trade openness acceleration | | 0.016** (0.008) | |
| T_2 x trade openness acceleration | | -0.002 (0.008) | |
| T_3 x trade openness acceleration | | -0.004 (0.007) | |
| T_4 x trade openness acceleration | | -0.004 (0.008) | |
| T_1 x change unemployment | | | -0.022*** (0.008) |
| T_2 x change unemployment | | | -0.011 (0.008) |
| T_3 x change unemployment | | | 0.007 (0.008) |
| T_4 x change unemployment | | | -0.014* (0.008) |
| Observations | 27,310 | 27,310 | 27,310 |
| R-squared | 0.059 | 0.059 | 0.059 |

Note: The dependent variable is a dummy for individuals supporting increasing trade. All columns include as controls individual characteristics, order effects, and country fixed effects. Imports (trade openness) correspond(s) to the ratio between merchandise imports (trade) and GDP. Acceleration is the difference between the periods 2016-2019 and 2013-2016. Change is the difference between 2016 and 2019. The country-level covariates are standardized. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table B.7: Heterogeneous effects: Trust and support for trade

| VARIABLES | (1) Support | (2) Support |
|---------------------------------|----------------------|----------------------|
| Anti-Trade/Job-Loss (T_1) | -0.065*** (0.008) | -0.065*** (0.008) |
| Anti-Trade/Compensate (T_2) | -0.084*** (0.008) | -0.085*** (0.008) |
| Pro-Trade/Job-Gain (T_3) | 0.036*** (0.007) | 0.035*** (0.007) |
| Pro-Trade/Job-Loss (T_4) | -0.004 (0.007) | -0.004 (0.007) |
| T_1 x trust in government | 0.000 (0.007) | |
| T_2 x trust in government | -0.024*** (0.008) | |
| T_3 x trust in government | -0.010 (0.007) | |
| T_4 x trust in government | -0.011 (0.007) | |
| T_1 x support for trade | | -0.011 (0.008) |
| T_2 x support for trade | | -0.017** (0.008) |
| T_3 x support for trade | | -0.013* (0.007) |
| T_4 x support for trade | | -0.019** (0.007) |
| Observations | 27,310 | 27,310 |
| R-squared | 0.059 | 0.059 |

Note: The dependent variable is a dummy for individuals supporting increasing trade. All columns include as controls individual characteristics, order effects, and country fixed effects. The average trust and support for trade were computed using information for the control group only. The country-level covariates are standardized. Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table B.8: Average treatment effects and support for trade: Probit model

| VARIABLES | (1) Support | (2) Support | (3) Support | (4) Support | (5) Support |
|---------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Anti-Trade/Job-Loss (T_1) | -0.061*** (0.008) | -0.062*** (0.008) | -0.063*** (0.008) | -0.061*** (0.008) | -0.064*** (0.008) |
| Anti-Trade/Compensate (T_2) | -0.078*** (0.008) | -0.079*** (0.008) | -0.081*** (0.008) | -0.079*** (0.008) | -0.082*** (0.007) |
| Pro-Trade/Job-Gain (T_3) | 0.042*** (0.008) | 0.042*** (0.008) | 0.041*** (0.008) | 0.042*** (0.008) | 0.040*** (0.008) |
| Pro-Trade/Job-Loss (T_4) | -0.003 (0.008) | -0.005 (0.008) | -0.002 (0.008) | -0.003 (0.008) | -0.005 (0.008) |
| Observations | 27,310 | 27,310 | 27,310 | 27,310 | 27,310 |
| $\beta_1 = \beta_2$ (p-value) | 0.019 | 0.018 | 0.012 | 0.019 | 0.011 |
| $\beta_1 = -\beta_3$ (p-value) | 0.177 | 0.147 | 0.104 | 0.170 | 0.076 |
| $\beta_3 = \beta_4$ (p-value) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Country fixed effects | NO | YES | NO | NO | YES |
| Individual controls | NO | NO | YES | NO | YES |
| Order effects | NO | NO | NO | YES | YES |

Note: The dependent variable is a dummy equal to one if the individual supports increasing trade. All columns report the marginal effects of estimating equation (2.1) using a Probit model. Individual controls include age, gender, marital status, education level, and employment status. Order effects correspond to a dummy if the first answer option for the support-for-trade question was “increasing trade”. Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table B.9: Average treatment effects and support for trade, excluding no response

| VARIABLES | (1) Support | (2) Support | (3) Support | (4) Support | (5) Support |
|---------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Anti-Trade/Job-Loss (T_1) | -0.051*** (0.007) | -0.051*** (0.007) | -0.052*** (0.007) | -0.052*** (0.007) | -0.052*** (0.007) |
| Anti-Trade/Compensate (T_2) | -0.063*** (0.007) | -0.063*** (0.007) | -0.064*** (0.007) | -0.063*** (0.007) | -0.064*** (0.007) |
| Pro-Trade/Job-Gain (T_3) | 0.030*** (0.006) | 0.029*** (0.006) | 0.029*** (0.006) | 0.030*** (0.006) | 0.028*** (0.006) |
| Pro-Trade/Job-Loss (T_4) | -0.002 (0.007) | -0.004 (0.007) | -0.001 (0.007) | -0.002 (0.007) | -0.004 (0.007) |
| Observations | 25,191 | 25,191 | 25,191 | 25,191 | 25,191 |
| R-squared | 0.009 | 0.023 | 0.023 | 0.011 | 0.043 |
| $\beta_1 = \beta_2$ (p-value) | 0.140 | 0.144 | 0.143 | 0.134 | 0.143 |
| $\beta_1 = -\beta_3$ (p-value) | 0.067 | 0.056 | 0.048 | 0.063 | 0.035 |
| $\beta_3 = \beta_4$ (p-value) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Country FE | NO | YES | NO | NO | YES |
| Individual controls | NO | NO | YES | NO | YES |
| Order effects | NO | NO | NO | YES | YES |

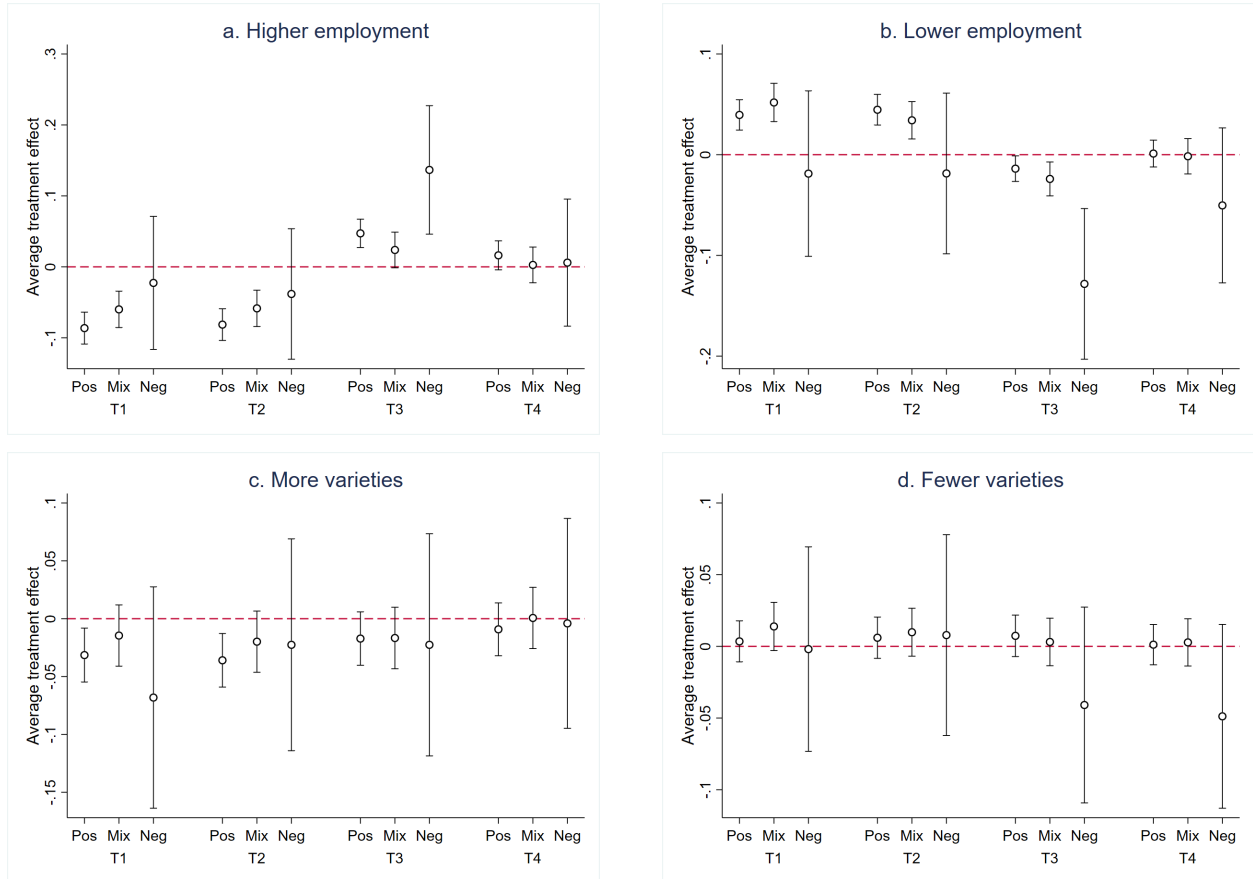
Note: The dependent variable is a dummy equal to one if the individual supports increasing trade. Cases with "Do not know" or "No answers" are excluded from the sample. All columns report the estimates of equation (2.1). Individual controls include age, gender, marital status, education level, and employment status. Order effects correspond to a dummy if the first answer option for the support-for-trade question was "increasing trade". Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table B.10: Average treatment effects and support for trade, one treatment at a time

| VARIABLES | (1) Support | (2) Support | (3) Support | (4) Support |
|---------------------------------|----------------------|----------------------|---------------------|-------------------|
| Anti-Trade/Job-Loss (T_1) | -0.064*** (0.008) | | | |
| Anti-Trade/Compensate (T_2) | | -0.085*** (0.008) | | |
| Pro-Trade/Job-Gain (T_3) | | | 0.035*** (0.007) | |
| Pro-Trade/Job-Loss (T_4) | | | | -0.004 (0.007) |
| Observations | 10,926 | 10,997 | 10,848 | 11,045 |
| R-squared | 0.061 | 0.053 | 0.066 | 0.063 |
| Country FE | YES | YES | YES | YES |
| Individual controls | YES | YES | YES | YES |
| Order effects | YES | YES | YES | YES |

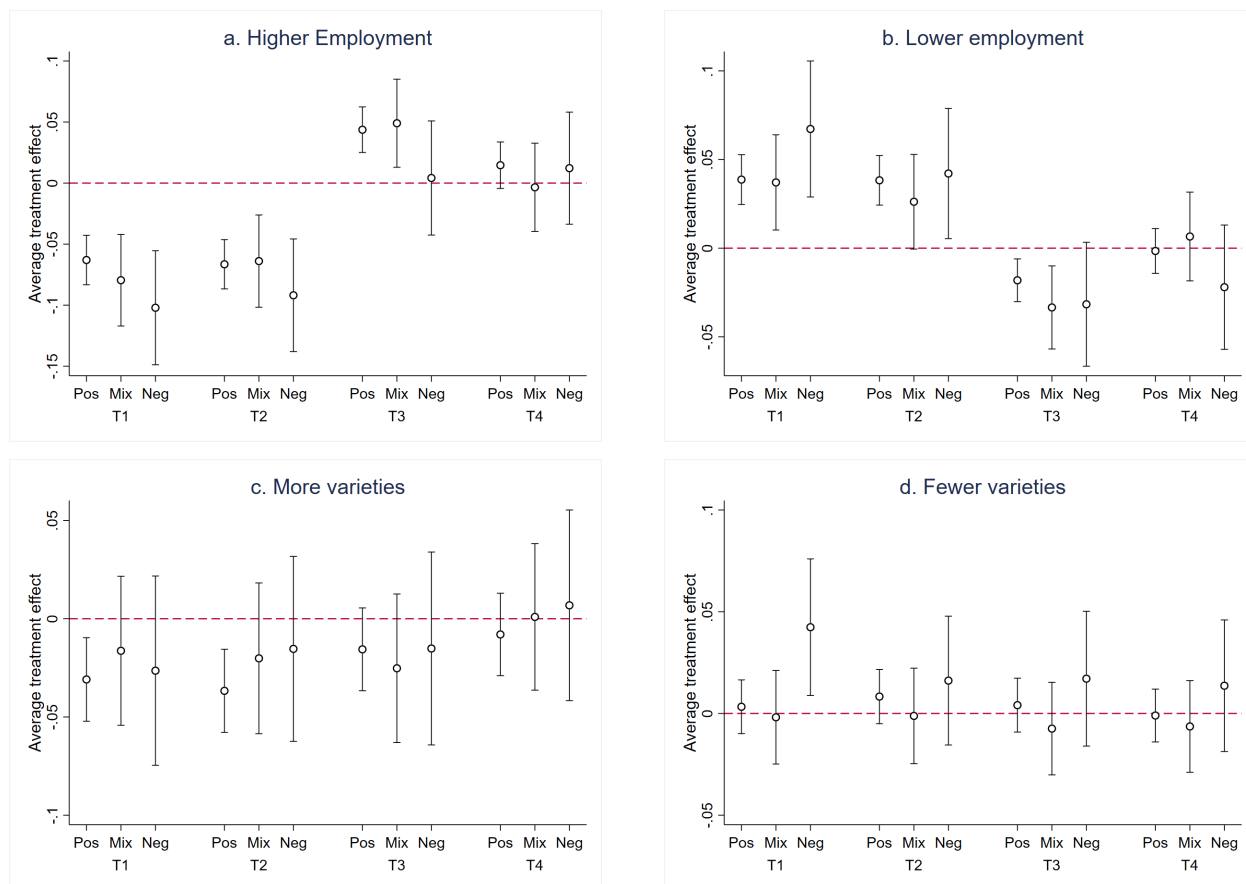
Note: The dependent variable is a dummy equal to one if the individual supports increasing trade. Each column reports the estimates of a version of equation (2.1) that compares each of the treatment arms with the control group. Individual controls include age, gender, marital status, education level, and employment status. Order effects correspond to a dummy if the first answer option for the support-for-trade question was “increasing trade.” Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Figure B.1: Trade beliefs and experts' views on trade



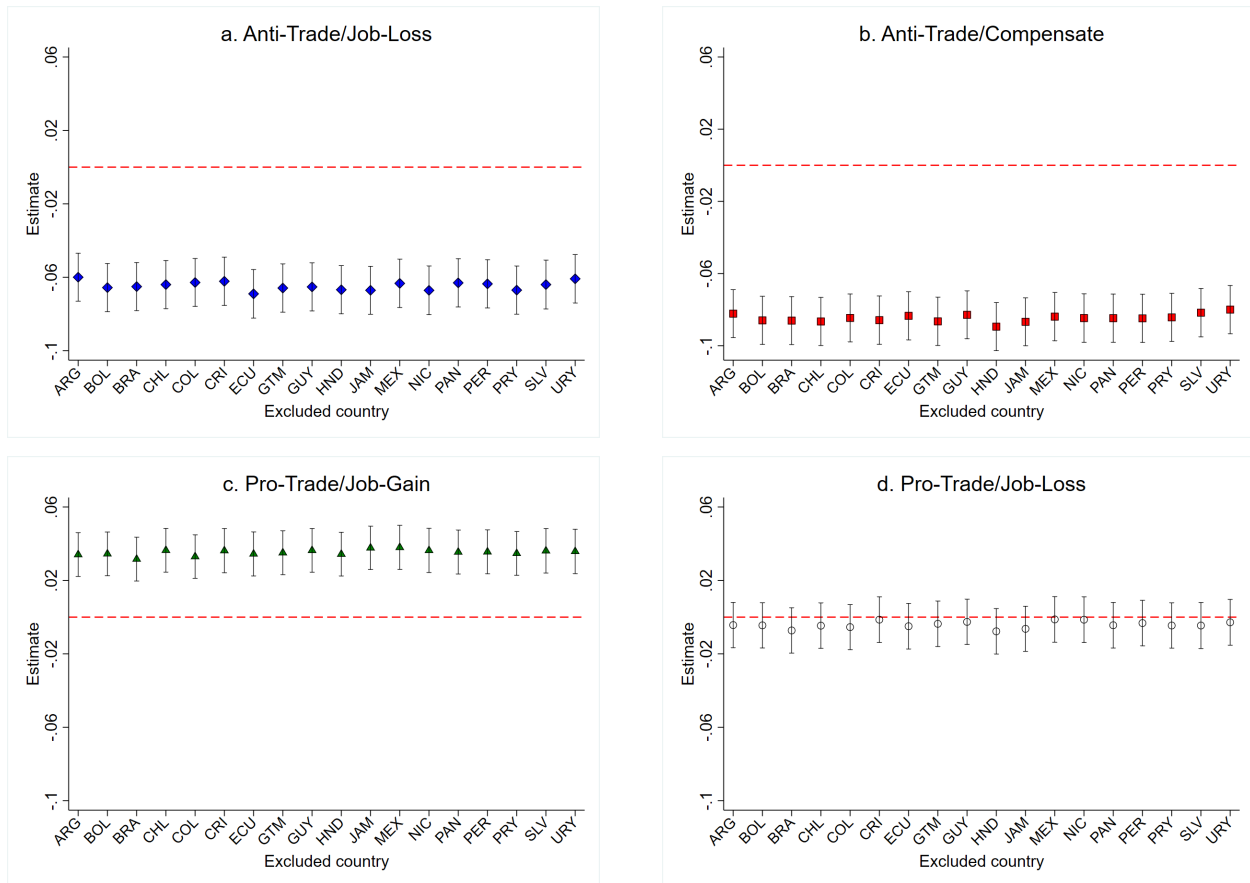
Note: The figure plots the average effect for each of the four treatments depending on whether the individual believes experts have positive (Pos.), negative (Neg.), or mixed (Mix) views on trade. The dependent variable is a dummy equal to one if the individual reports the belief mentioned in the title (higher employment in panel a, lower employment in b, more varieties in c, and fewer varieties in d). The treatments are: Anti-Trade/Job-Loss (T_1), Anti-Trade/Compensate (T_2), Pro-Trade/Job-Gain (T_3), and Pro-Trade/Job-Loss (T_4). The mixed views include individuals who responded don't know to the question. The estimates come from a specification with country fixed effects, order effects, and individual controls (age, gender, marital status, education level, and employment status). Ranges around the estimates correspond to the 95% confidence intervals.

Figure B.2: Trade beliefs and cultural influence of foreign countries



Note: The figure plots the average effect for each of the four treatments depending on whether the individual thinks relations with foreign countries have positive (Pos.), negative (Neg.), or mixed (Mix) influence on her country's culture. The dependent variable is a dummy equal to one if the individual reports the belief mentioned in the title (higher employment in panel a, lower employment in b, more varieties in c, and fewer varieties in d). The treatments are: Anti-Trade/Job-Loss (T_1), Anti-Trade/Compensate (T_2), Pro-Trade/Job-Gain (T_3), and Pro-Trade/Job-Loss (T_4). The mixed views include individuals who responded don't know to the question. The estimates come from a specification with country fixed effects, order effects, and individual controls (age, gender, marital status, education level, and employment status). Ranges around the estimates correspond to the 95% confidence intervals.

Figure B.3: Average treatment effects excluding one country at a time



Note: The figure plots the effect for each of the treatment groups excluding a country at a time as specified in the horizontal axis. Ranges around the effects correspond to the 95% confidence intervals.