

Working Paper No 2014/17

Different Countries, Same Partners? Experimental Evidence on PTA Partner Country Choice from Costa Rica, Nicaragua, and Vietnam

Víctor Umaña, Gabriele Spilker, Thomas Bernauer

Abstract

Preferential trade agreements (PTAs) are the most rapidly growing form of trade liberalization in the global economy, and many of these agreements involve developing countries. In contrast to trade liberalization via the World Trade Organization (WTO), PTAs discriminate among member countries raising the question which countries are preferred partners. Existing research analyzes partner country choices for PTAs at the macro (country) level. Even though public opinion is important in trade policy-making for normative and analytical reasons, we know very little about what types of countries citizens prefer for PTAs. We develop several hypotheses to that end, drawing on macro-level trade theories and micro-level evidence from advanced industrialized countries, and test them based on original data from Costa Rica, Nicaragua, and Vietnam. To account for the multidimensionality of PTA partner choice, we use conjoint experiments embedded in three national surveys. The results show that, despite differing country contexts, citizens in all three countries opt for similar PTA partners. We also find that cultural and political factors matter more than economic factors. Respondents prefer PTAs with culturally similar countries, whereas economic size and geographic distance are of lesser importance. One of the most surprising findings is, however, that people in all three countries, even in the poorest and most rapidly growing of the three countries (Vietnam), which is also the only autocratic country in the sample, prefer trade with countries that are democratic and have high environmental and labor standards. We also show that popular preferences line up well with the actual set of PTA partners of Costa Rica and Nicaragua, but less so in the case of Vietnam.

Research for this paper was funded by the Swiss National Science Foundation under a grant to the National Centre of Competence in Research on Trade Regulation, based at the World Trade Institute of the University of Bern, Switzerland.

NCCR TRADE WORKING PAPERS are preliminary documents posted on the NCCR Trade Regulation website (<www.nccr-trade.org>) and widely circulated to stimulate discussion and critical comment. These papers have not been formally edited. Citations should refer to an “NCCR Trade Working Paper”, with appropriate reference made to the author(s).

Introduction

The rapid expansion in the number of preferential trade agreements (PTAs) is one of the most striking features of today's world economy. Arguably the key reason why PTAs have become so popular in recent decades is the possibility to discriminate among member countries – which is at odds with the multilateral trading system (Dür, Baccini, and Elsig 2013; Mansfield and Milner 2012). The option to discriminate raises the question of how countries choose their PTA partners. While macro-level research on this topic has expanded rapidly (Baccini and Dür 2012; Baier and Bergstrand 2004; Baier, Bergstrand, and Clance 2014; Baldwin 2011; Dür, Baccini, and Elsig 2013; Egger and Larch 2008; Mansfield and Milner 2012) to the best of our knowledge, no systematic research exists on the micro foundations of PTA partner country choice.

Even though citizens only rarely vote directly on international trade issues, public opinion nevertheless plays an important role in trade policy-making (Kono 2008; Mansfield and Milner 2012). As trade liberalization efforts in recent years have increasingly shifted from the global to regional and bilateral levels, the characteristics of (potential) trade partner countries have moved to the forefront of public debates in this area. For example, Costa Rica held a population wide referendum on whether or not to ratify the Free Trade Agreement between the Dominican Republic, Central America and the United States (DR-CAFTA) with the power and economic asymmetry between Costa Rica and the United States being the central controversy in the campaign. DR-CAFTA also generated extensive media coverage in the United States, was referenced in several electoral campaigns, and was the most controversial vote on a trade agreement in the US Congress since NAFTA (Guisinger 2009; Hicks, Milner, and Tingley 2013; Hornbeck 2008; Urbatsch 2013).

This paper therefore examines what characteristics make countries more (or less) popular as international trade partners in what is currently the most prominent form of trade liberalization, namely PTAs. One important challenge in studying citizens' preferences concerning potential PTA partners is the inherent multidimensionality of partner country choice. That is, potential partner countries vary with regard to their economic size,

political system, social standards, and other factors, and these different dimensions need to be considered both at the theoretical and empirical level. Theoretically, we account for the multidimensionality of partner country choice by developing a set of hypotheses focusing on the implications of country characteristics. They are tested empirically using conjoint analysis, an experimental approach that is well suited for analyzing multidimensional choices. We embedded our conjoint experiments in surveys administered to national random samples in three developing countries: Costa Rica, Nicaragua, and Vietnam.

The paper contributes in several ways to the growing body of literature that seeks to explain citizens' trade policy preferences (e.g. Baker 2003; 2005; Beaulieu 2002; Beaulieu, Yatawara, and Wang 2005; Blonigen 2008; 2011; Fordham and Kleinberg 2012; Mansfield and Mutz 2009; Mayda and Rodrik 2005; O'Rourke and Sinnott 2001; Scheve and Slaughter 2001). In addition to theoretically and empirically unpacking the multidimensionality of PTA partner country choice, we use novel experimental data from three developing countries, thereby expanding the usually rather narrow empirical focus of existing research.

From an academic viewpoint, Costa Rica, Nicaragua, and Vietnam are well suited for examining whether and how citizens' preferences with respect to trade partner countries differ in theoretically predictable ways, and whether there are interesting differences in this respect compared to what we know about trade preferences in advanced industrialized countries. Moreover, the majority of studies on individual trade policy preferences focus on very few highly advanced industrialized countries, above all the United States (e.g. Blonigen 2008; 2011; Fordham and Kleinberg 2012; Guisinger 2009; Hainmueller and Hiscox 2006; Mansfield and Mutz 2009; Rho and Tomz 2012; Scheve and Slaughter 2001). A few other studies focus on Canada (Beaulieu 2002), Switzerland (Bechtel, Bernauer, and Meyer 2012; Spilker, Schaffer, and Bernauer 2012), and Japan (Naoi and Kume 2011). Several studies also use data from international omnibus surveys, such as World Values Survey (Baker 2005; Mayda and Rodrik 2005; O'Rourke and Sinnott 2001), Eurobarometer (Gabel 1998; Hooghe and Marks 2004; Schaffer and Spilker n.d.), and *Latinobarómetro* (Baker 2003; Beaulieu, Yatawara, and Wang 2005).

Baker (2003) and Lü and Scheve (2012) are, to our knowledge, the only studies that use original surveys to examine individual trade policy preferences in large developing countries, Brazil and China respectively.

Vietnam has an autocratic one-party system. However, its shift from a centrally planned to a market economy has transformed the country from one of the poorest in the world into a lower middle-income economy. It has joined the WTO and ASEAN, and has successfully negotiated several PTAs. Nicaragua is the second poorest nation in Latin America, after Haiti. Following a short-lived socialist regime and decades of political instability, the country has, as a result of recent market economy and trade liberalization reforms increased its economic performance. Nicaragua is one of the oldest members of the GATT, and has several PTAs in force, including DR-CAFTA, the Association Agreement with the EU, and is a member of the Central American Common Market (CACM). Costa Rica, an upper middle-income country, is the oldest democracy in Latin America, and after the debt-crisis of the 1980s had embarked on an ambitious trade liberalization process. In 2007, the country held a nation-wide referendum on the ratification of a trade agreement with the United States (DR-CAFTA), a first for a developing country. Hence it is interesting, from a policy-maker's perspective, to understand how the public views international trade under such different conditions, and whether similar (or different) factors, compared to advanced industrialized countries, play a role in shaping public opinion on trade (Mansfield and Milner 1999; 2012)

Interestingly, , our empirical results show that individuals in the three countries opt for very similar trade partner countries across the board. Individuals in all three countries prefer to trade with economies of similar or larger size, confirming classical gains from trade arguments, whereas distance (geographic proximity) has no effect. Cultural similarity turns out to be more important than these economic considerations since individuals in all three countries strongly opt for culturally similar PTA partners. In contrast to our expectations, individuals in Vietnam, Nicaragua and Costa Rica do not differ significantly in their evaluation of a partner country's political system and its labor and environmental standards. We observe, for example, that even individuals in poorer and rapidly growing countries, such as Vietnam and Nicaragua, prefer trade with

countries that have higher environmental and labor standards. Similarly, not only do respondents in Costa Rica and Nicaragua prefer PTAs with (other) democratic countries, which is what we expected. Also respondents in Vietnam – an autocracy – opt for democratic PTA partner countries. Finally and in contrast to what relative gains arguments on trade claim, security considerations seem to play only a very minor role. Only in the case of Vietnam are other countries less attractive as trade partners if they are not security allies.

The next section of the paper outlines theoretical arguments concerning factors we expect to influence PTA partner country preferences. We then describe the empirical design, present the results, and end by discussing the implications for further academic research and for policy-making.

Theory

Selecting one PTA partner country over another involves a multidimensional choice, in that potential partner countries vary with regard to their economic size, their culture, their political system, and other attributes. To theoretically account for this multidimensionality, we build on both macro-level trade theories and micro-level evidence for advanced industrialized countries to identify characteristics that should be decisive for citizens' preferences. In particular, we consider the following partner country characteristics: geographic distance and economic size, cultural similarity, a country's political system, membership in security alliances, and social and environmental standards. For each of these factors, we set forth predictions on whether the respective attribute of a potential partner country will increase (or decrease) support, depending on the respondent's home country. Due to different country contexts (such as autocratic vs. democratic political systems, and level of economic development), individuals from Costa Rica, Nicaragua, and Vietnam could display different preferences with regard to which country characteristics make a partner more (or less) attractive.

Distance and economic size – consumer gains

At the macro-level, distance and economic size of trading partners, analyzed under the scope of the gravity model have shown to be determinants of trade flows and PTA formation {Baier:2004ij, Baier:2014tg, Linders:2008bh, Dur:2013wi}. But, why and how these two variables should matter for the individual? With regard to economic size, we contend that trade with larger economies should be more attractive than trade with economies of similar size, or with smaller economies – all else equal.¹ We submit that individuals should value economic size when choosing between partner countries since trade with a similar sized or larger partner country is likely to involve greater economic gains derived from increased consumption possibilities². Consumer behavior is an important source of trade policy preferences {Baker:2005wd}. Even in advanced economies less than 70% of population is part of the labor force, however, most humans beings engage daily in consumption activities. In fact, in developing economies, citizens are more likely to assess trade policy from a consumer perspective {Baker:2003vq}. We thus expect individuals to associate a partner country with a similar or larger economy with welfare enhancing gains (Baker 2003; 2005; Grossman and Helpman 1995).

The second component of the gravity model holds that countries should trade more with geographically more proximate countries. The reason is that greater distance involves higher transportation costs reducing thus the benefits of trade. At the micro-level, individuals are likely to draw similar conclusions. In addition, and perhaps more importantly, physical proximity is likely to contribute to familiarity, which in turn could increase trust and reduce uncertainty (Kaltenthaler and Miller 2013; Spilker, Schaffer, and Bernauer 2012). Translation of this second component of the gravity model from the macro- to the micro-level leads us to expect that citizens prefer trade with geographically more proximate countries – all else (e.g. cultural similarity, security relations) equal.

¹ This means for instance that we need to control for security relations. The reason is that larger economies, because they tend to have stronger military capabilities, may pose security threats to smaller economies. For example, the most proximate large economy in the case of Vietnam is China, and relations between the two countries are quite strained because of military-security rivalries. The most proximate large economy in the case of Costa Rica and Nicaragua is the United States. The quality of security relations between/among the three countries differs – with territorial disputes between Costa Rica and Nicaragua, and a history of military intervention of the United States in Nicaragua.

² And to a lesser extent access to a larger export market for home products.

H1: Individuals prefer PTAs with larger economies and with geographically more proximate countries.

Psychic Distance

Various studies note that distance should be understood in broader than simply geographic terms. They have coined the term “psychic distance” to denote a set of less tangible factors that may also explain resistance to (or support for) trade. In particular, several authors note that similarities in culture, religion, and language are likely to be important determinants of PTA formation (Dür, Baccini, and Elsig 2013; Frankel, Stein, and Wei 1998; Liu 2010; Mansfield and Milner 2014; Rauch 1999). While an extended definition of psychic distance could also include similarity of political regime type, security relations, and environmental and labor standards (Gowa and Mansfield 1993; Mansfield and Milner 2012; 2014), we treat these factors separately (see below) and focus on cultural similarity at this point.

The reasons why culturally more similar countries are likely to trade more with each other are based on psychological ingroup-outgroup feelings, national images, as well as economic considerations. Findings from business, marketing and social psychology research indicate that individual predispositions towards other countries, rooted in culture, are important determinants of economic exchanges and thus of individual trade preferences (Guiso, Sapienza, and Zingales 2009; Klein 2002; Klein, Ettenson, and Morris 1998; Verlegh and Steenkamp 1999). At the individual level, consumer-based theories of political preferences suggest that individuals are more likely to base their trade policy preferences on their own patterns of personal consumption, rather than their status as producers or income earners (Baker 2003; 2005; Rho and Tomz 2012). Consumers tend to rely on heuristics from national images when making purchasing

decisions. Individuals are thus primed by country-of-origin cues to feel and behave in predictable ways (Hearn 2013).³

The idea that cultural similarity acts as an informational heuristic is also at the center of several studies examining how differences in psychic distance influence bilateral trade flows (Dow 2006; Dow and Karunaratna 2006; Guiso, Sapienza, and Zingales 2009; Linders, Burger, and van Oort 2008; Linders et al. 2005; Rauch 1999). The finding that differences in language, education, and political systems have a statistically significant trade inhibiting effect is interpreted in the sense that these factors restrict the flow of information in economic exchange and constrain businesses' ability to learn about partners, thus generating uncertainty. Hence the macro-level phenomenon that larger psychic distance reduces trade flows is explained via a (presumed) micro-level mechanism associated with learning and uncertainty reduction.

With regard to PTA partner country choices, we expect cultural similarity to act as an informational cue akin to the mechanism just described.⁴ If another country's population speaks the same language and shares a similar religious background this should signal to individuals that information should flow easily through economic exchanges, thus reducing uncertainty. Perhaps even more important, commonality between languages and religions should affect PTA partner country choices through its effects on bilateral trust – i.e., how much individuals in one country trust people from the other country (Guiso, Sapienza, and Zingales 2009). Trust levels are affected by cultural commonalities concerning religion, history of conflicts, and genetic and somatic factors (i.e. whether people look like them or not). Since lower levels of trust are associated with less

³ Verlegh and Steenkamp (1999) argue, for instance, that country of origin affects consumer product evaluation through three mechanisms: cognitive, affective and normative. As such, country of origin is a cue for product quality, signaling attributes such as reliability or durability (cognitive). At the same time, it is an image attribute that links the product to symbolic and emotional benefits (affective). Finally, as consumers hold social and personal norms related to the country of origin, purchases from countries with objectionable activities or regimes would be deemed unacceptable (normative) (Verlegh and Steenkamp 1999).

⁴ It should be noted at this point that our empirical analysis will capture country characteristics in stylized form, and will not refer to specific countries by name (Drezner 2008; Fordham and Kleinberg 2011; 2012; Morrow, Siverson, and Tabares 1998). The reason is that the latter approach would evoke various associations on the part of respondents, without providing clarity on what types of country characteristics are in fact shaping individual preferences. For instance, if we found a negative reaction of Vietnamese respondents to a proposed PTA with China we would not learn whether this reaction was due to China's much larger economic size, security problems between the two countries, differences in environmental and/or labor standards, or other factors.

economic exchange between two countries and, as a consequence, also with less positive trade preferences (Kaltenthaler and Miller 2013; Nguyen and Bernauer 2014; Spilker, Schaffer, and Bernauer 2012), we expect psychic distance through its effect on trust to influence PTA partner choices. Individuals should therefore put more trust in a PTA with a partner country that has a similar cultural background. That is, individuals are likely to prefer PTAs with culturally similar countries. For the three countries on which the empirical analysis will focus, this means that respondents from Nicaragua and Costa Rica are likely to prefer Spanish speaking and Christian countries, whereas respondents from Vietnam are likely to favor countries from the Buddhist and Lunar Year tradition.

H2: Individuals prefer PTAs with countries that are culturally similar.

Political regime type

Several studies show that shared (dyadic) democracy is one of the strongest predictors of PTA formation (Mansfield and Milner 2012; Mansfield, Milner, and Pevehouse 2008). With regard to citizens' preferences, we expect the political system to play an important role primarily for three reasons: common value systems, the respect for the rule of law, and the importance of relative gains.⁵

Similar to the psychic distance mechanism discussed above, sharing the same political system could signal that the respective partner country and its population subscribe to the same general socio-political value system. According to this logic, individuals should then prefer trade partners that have the same political institutions because they expect these countries to have similar interests (Russett and Oneal 2001). Since entering into a PTA involves a mutual commitment to lower barriers to the exchange of goods and

⁵ Several studies also refer to an instrumental logic. As Mansfield and Milner point out (2012), political leaders can use PTAs to signal to voters that their policies are not determined solely by parochial interest groups, and that they credibly commit to lower levels of protectionism. Conversely, they note that autocracies have weaker incentives to enter into trade agreements because their leaders encounter fewer constraints than their democratic counterparts. However, autocracies do sign PTAs (e.g. Vietnam and China) and politically more competitive autocracies are more likely to sign PTAs than less competitive ones because of the credibility these agreements provide. This argument presumes, of course, that – de facto, and/or from the viewpoint of the democratic median voter – free trade enhances collective welfare and thus has the properties of a public good. It is primarily monadic and does, therefore, not generate clear predictions for our specific purposes. That is, it hypothesizes that democracies are more likely to initiate PTAs, but does not say whether the partner country will also be a democracy.

services, people are likely to find it more acceptable to enter in such a commitment with a partner country that shares the same basic political values.

The second argument on why political regime type should matter for trade partner country choices centers on individuals' expectation concerning the extent to which the partner country will abide by the rule of law and, in consequence, abide by agreed PTA rules. The literature typically acknowledges that democracies, by and large, are characterized not only by electoral competition, but also by a higher respect for the rule of law (Li 2006). If, at the micro-level, individual citizens are aware of this they are likely to expect democracies to abide by and respect the rules of trade agreements and are thus likely to prefer PTAs with democracies.

Moreover, since democracies rarely if ever fight each other militarily or engage in strong military/security rivalries (Levy 1988; Tomz and Weeks 2013) this will mitigate potential fears about unequal relative gains from trade that might translate into military/security advantages. Again, if citizens from democratic countries are aware of this, they will be more likely to favor PTAs with other democracies, since they expect democracies to use the increased wealth derived from commercial exchange for peaceful purposes.

The arguments just discussed generate unambiguous predictions for Costa Rica and Nicaragua, both of which are democracies. Individuals in both countries should prefer their governments to choose other democracies as PTA partners for the three reasons just outlined: they view other democracies as sharing a joint value system; they expect greater compliance by these partners and are likely to be less worried about security implications of unequal relative gains.

What to expect in the case of Vietnam is somewhat less clear. If we view political regime type in the sense of a psychic distance factor we should expect citizens in Vietnam (on average) to prefer PTAs with other autocracies. However, if Vietnamese citizens expect greater compliance by democracies (because of stronger rule of law in these countries) they should prefer PTAs with democracies. The caveat here is that, if they view trade as a relative gains issue with security implications, they might be worried about PTAs with countries of different political regime type because the democratic peace constraint does not apply to non-democratic/democratic or to non-democratic/non-democratic dyads.

For these reasons we expect respondents from Costa Rica and Nicaragua to favor PTAs with democracies, whereas theory does not allow for an unambiguous prediction in the case of Vietnam.

H3: Individuals from democratic countries prefer PTAs with democratic countries.

Military and security alliances

Several empirical studies have found that countries are more likely to establish PTAs with countries with which they have stronger security/military ties (Gowa and Mansfield 1993; Mansfield and Milner 2014). The dominant argument is that PTAs among members of a security or military alliance can contribute to the overall capacity of the alliance as trade gains help enhance military capabilities of the parties (Gowa and Mansfield 1993). Conversely, countries have little incentive to form a PTA with an adversary due to security externalities that might derive from gains from trade (Drezner 2008; Gowa and Mansfield 1993; Morrow, Siverson, and Tabares 1998). For the same reasons, concerns about asymmetric relative gains from trade are likely to be smaller if two countries have closer security ties (Grieco 1988; Liberman 1996) .

Translating this argument from the macro- to the micro-level implies that individuals should prefer partner countries with which they already have an alliance. The reason is that they should expect their allies to use gains from trade for purposes of mutual interest. In addition, as already outlined above, if citizens are aware that trade can create unequal relative gains that can translate into military/security advantages, opting for a PTA partner country that already is an ally will mitigate potential security fears. Consequently, we expect individuals to prefer PTAs with security allies, all else equal.

However, historical context is likely to matter and may generate differences across the three countries on which we focus empirically. Vietnam and Nicaragua experienced prolonged military conflicts in the latter part of the 20th century, with the United States as the main adversary. Both countries have active armies with influential roles in politics, and security/military concerns are important for political and economic elites. While the conflict between Nicaragua and the United States has subsided in the past 20 years, the US-Vietnamese conflict has been replaced by security problems between Vietnam and

China. For these reasons, we expect the postulated effect to be stronger in the case of Vietnam than in Nicaragua, and there is likely to be no such effect in the case of Costa Rica. The latter abolished its army in 1949 and successfully isolated itself from the Central American armed conflicts of the 20th century.

H4: Individuals favor PTAs with security allies. This effect is likely to be strongest for Vietnam, followed by Nicaragua, and is likely to be non-significant in Costa Rica.

Environmental and labor standards

Social and environmental policies differ quite strongly across countries (Bernauer and Böhmelt 2013). This variation is a function of differences in economic development levels, factor endowments, natural resource endowments, political regime type, and other factors. Arguments on post-material value systems, which are particularly prominent in the literature in this field, hold that variation in environmental and social policy preferences is influenced by per capita income differences: as individuals become richer, their demand for social policies and higher environmental standards also grows (Anderson 1997; Bechtel, Bernauer, and Meyer 2012; Ferrantino 1997; Franzen and Meyer 2010; Spilker 2013).

Increasing international economic integration (globalization) has led to debates about the implications of trade openness for domestic environmental and social policies, and about the need for international coordination or harmonization of such policies. While some studies regard international trade as a mechanism that may contribute to higher environmental and social policy standards in countries that start off with lower standards (Bernauer and Caduff 2004; Prakash and Potoski 2006; Vogel 1997), other studies point to negative consequences for domestic environmental and social policy (Bernauer and Böhmelt 2013; Dean, Lovely, and Wang 2009; Javorcik and Wei 2004; List and Co 2000).

The increasing prevalence of environmental and social standards in PTAs and debates in the WTO and elsewhere on the nexus between trade liberalization, environmental standards, and social policy suggest that governments and presumably also their citizens connect these policy issues. PTA negotiations have become particularly prominent fora

for linking these issues because they are more flexible legal instruments, compared to global trade policy-making in the WTO (Cottier 2002; Hafner-Burton 2005; Spilker and Böhmelt 2013).

From the perspective of advanced industrialized countries, this suggests that unfettered trade may have undesirable environmental and social implications that need to be mitigated through international collaboration, within or outside trade agreements. Indeed, a recent study by Bechtel, Bernauer and Meyer (2012) shows that individuals in industrialized countries who hold greener attitudes also hold more negative views on international trade. Hence we should expect that citizens from industrialized countries prefer PTAs with countries that have similar or perhaps even higher environmental and social standards. A study by Umaña, Bernauer and Spilker (2014), based on a survey in the United States, offers support for this argument. Although this finding is consistent with arguments centered on avoiding harmful competition by means of environmental and/or social deregulation, which may be triggered by economic openness, it is also consistent with an argument that considers environmental and social standards as cues for more general social value systems, and a preference for minimization of psychic distance (see above).

What to expect in the case of developing countries is somewhat less clear. Many of the recently established PTAs involving advanced industrialized countries have binding provisions for protecting labor rights and the environment. Anderson (1997) argues that PTAs involving advanced economies have more social and environmental provisions than those between developing countries because the demand for these policies is income elastic, and barriers to trade tend to be lower among developed countries than between them and developing countries or among developing countries (Anderson 1997). Viewed from this perspective, one should expect citizens from developing countries, unlike those from advanced economies, to prefer PTAs with countries that have lower or similar environmental and labor standards because of the lower demand for environmental and social protection in these countries.

Again, we need to pay attention to historical and economic context and therefore expect some differences between the three countries of interest here. Costa Rica is an upper

middle-income economy with a long-standing tradition of social and environmental protection. It ranks #1 in Latin America and #25 in the world on the Social Progress Index, which measures social and environmental performance alongside GDP (Porter, Stern, and Green 2014). Nicaragua is the second poorest country in the Western Hemisphere after Haiti. Poverty and unemployment are widespread, and environmental and labor standards are relatively low and poorly enforced. The country ranks at the bottom of the Environmental Performance Index in items related to forest and water access and protection (EPI 2014). Nicaragua competes in the global arena primarily on the basis of low skilled labor and natural resources (Sala-i-Martin and Schwab 2012). Vietnam has experienced impressive economic growth since the implementation of the doi moi reforms. But its social and environmental performance is weak. Like Nicaragua, Vietnam competes on the basis of price and sells basic products and commodities, with low productivity reflected in low wages (Sala-i-Martin and Schwab 2012). Environmental degradation and poorly enforced standards are well documented by government, international and foreign aid organizations (Loan 2011; Monre 2014; Vietnam News 2013). The Environmental Performance Index ranks Vietnam 136 out of 178 countries, which makes the country one of the worst environmental performers among ASEAN economies (EPI 2014).

We expect these different conditions to have implications for whether citizens prefer PTA partners with higher (or lower) environmental and labor standards. In both Nicaragua and Vietnam, low labor and environmental costs form part of the general economic strategy of competing on prices in labor and natural resource intensive products. In contrast, the characteristics of Costa Rica's economy as well as its existing environmental and social policies suggest that there should be more demand for social and environmental protection. Hence we expect respondents from Costa Rica to be in favor of PTA partner countries with similar or higher environmental and social standards, whereas the effect should be less pronounced or reversed in Nicaragua and Vietnam.

H5: Individuals in Costa Rica are likely to prefer PTAs with countries that have similar or higher environmental and labor standards. This effect should be less pronounced or reversed in Nicaragua and Vietnam.

Empirical Design

To empirically assess the importance of particular country characteristics when citizens form their preferences concerning PTA partners, we implemented conjoint experiments, an approach well-suited for analyzing multidimensional choices. The experiments were embedded in surveys administered to national random samples in three developing countries: Costa Rica, Nicaragua, and Vietnam. Table 1 highlights the main characteristics of and differences between the three countries that are relevant for our research.

Table 1 about here

The three population-based survey experiments in Costa Rica, Nicaragua, and Vietnam were implemented from December 2013 to February 2014. They were administered face-to-face to representative samples of the population aged 18 to 64. Sample sizes were 820 in Costa Rica, 800 in Nicaragua, and 700 in Vietnam. Our surveys in Costa Rica and Nicaragua covered the entire country. In Vietnam we restricted the sampling to the Hanoi and Ho Chi Minh City (HCMC) areas, which also include large rural districts. The latter restriction was used for logistical and cost reasons. As shown by (Nguyen and Bernauer 2014) the socio-demographics of these two areas are very similar to the socio-demographics of the entire country.

We used a stratified multi-stage probabilistic sampling strategy based on censal segments, moving first from the region/city level to the district level and then to the ward/commune/segment level where households and individuals therein were selected. First, districts were selected according to populated areas within each region/city, using systematic random selection with probability proportional to size (PPS). In the next stage, clusters or blocks of households were randomly selected from within the different districts. To ensure the diversity and representativeness of our sample, ten interviews were fixed for each cluster. This means 820 clusters in Costa Rica, 800 in Nicaragua and 700 in Vietnam. Households in each cluster were selected at a fixed interval, departing

from a predefined point using the right hand rule. Respondents in the selected households were chosen based on the *Kish Grid* method. Gender and age quotas were used to generate a sample that is similar to the national distribution on these two variables.⁶

The key part of the survey consists of a conjoint experiment (Green, Krieger, and Wind 2001; Hainmueller, Hopkins, and Yamamoto 2014). In conjoint experiments, much like in the real world of policy-making, respondents are confronted with options (profiles) that vary on several dimensions (attributes), and they are asked to state their preferences with regard to the overall profile. This approach tends to mitigate problems of social desirability in surveys because respondents do not have to reveal which attributes of an option they find more or less attractive. Conjoint experiments therefore allow for simultaneous testing of several causal hypotheses since each attribute can be conceptualized as expressing a particular explanatory variable.

In a typical conjoint experiment, respondents are asked to choose or rate two or more hypothetical profiles (options) – potential trade partner countries in our case – that combine a set of randomized attributes. The researcher can then identify the causal effect – the Average Marginal Component Effect (ACME) – of each attribute value on the probability that a particular profile will be chosen, or on how positively (or negatively) the profile was rated (Hainmueller, Hopkins, and Yamamoto 2014).

We used a particular variety of conjoint analysis, called choice-based conjoint analysis. Individuals were confronted, in stylized form, with potential trade partner countries that vary with respect to several characteristics (attributes) and were then asked to express their preferences in binary terms (which country they prefer) and on a seven point scale (how much they prefer each of the two countries). Consequently, respondent choices or ratings form our dependent variable, while country attributes correspond to the explanatory variables in our hypotheses. Respondents were asked to complete five choice tasks, each of which consisted of profiles of two potential trade partner countries with a fixed set of attributes whose values varied between and across the choice-tasks. Because the attribute values are randomly assigned, the choice-based conjoint design enables us to

⁶ Socio-demographic data and its comparison with census figures are shown in Appendix 1.

estimate the effect of each attribute value on preferences concerning trade partner countries.

According to our theoretical framework, we focus on eight attributes of potential trade partner countries: economic size and geographic distance from the respondent's country (see Hypotheses 1); language/culture (Spanish in Costa Rica and Nicaragua, lunar new year celebrations in Vietnam) and religion (see Hypothesis 2); political system type (see Hypothesis 3); military/security alliance (see Hypothesis 4); and environmental and labor protection standards (see Hypothesis 5). Table 2 offers an overview of attributes and their possible expressions (values). To allow for consistent testing of the hypothesis on political system type (H3) across the different contexts of the three countries, we avoided the term democracy and focused on what we regard as the most important element of democracy, namely the procedure for selecting the political leadership.

Table 2 about here

The conjoint part of the survey started with a short introductory text⁷ and instructions on how to complete the choice-tasks. We then presented a table describing each of the attributes (see Table 2) before proceeding to the actual choice tasks (for further details, see Appendix 2). On the following pages of the survey, pairs of potential PTA partner countries were shown. We used a completely independent randomization of the values for each attribute presented to the respondent. To facilitate the tasks for respondents while also minimizing primacy and recency effects, we followed Hainmueller et al. (2014) and presented attributes in a randomized order that was fixed across the pairings for each respondent.

⁷ “[Country] is currently negotiating international trade agreements with other countries. The purpose of such trade agreements is to make it easier for producers from other countries to sell their goods and services in [country] (imports), and to make it easier for producers based in [country] to sell their goods and services in other countries (exports). [country] is considering different partner countries for such trade agreements. These partner countries may differ with respect to their characteristics. For a start, please look at the following table very carefully. It describes some basic characteristics partner countries for international trade agreements with [country] may have.”

Using this setup, the unit of analysis is the country profile. This generates a maximum of 2 (profiles) * 5 (choice tasks) * # respondents (820 in Costa Rica, 800 in Nicaragua, and 700 in Vietnam) observations; i.e. 8200 in the case of Costa Rica, 8000 for Nicaragua, and 7000 for Vietnam. The seven-point scale of the second dependent variable, where 1 indicates that the respondent would “never support” a PTA with the respective country and 7 indicates that she would “always support” an agreement with this country, was rescaled to range from 0 to 1. Following Hainmueller et al. (2014), we estimate the AMCEs by regressing either the choice or the ranking variable on the different values of the attributes (e.g. whether the potential partner country is a military ally), each of which is measured in binary form. Standard errors are clustered on the respondent to account for the non-independence of their (2x5) choices.

Conjoint experiments of the type we use have thus far only been implemented online. Since online-surveys turned out to be too difficult to implement in developing countries because of limited internet access and security reasons we designed a face-to-face application based on Strezhnev et al. (2013)

Results

We start by presenting the main findings and compare results for the binary choice and the rating tasks. We then juxtapose our findings on the de facto PTA partners of the three countries in the analysis. To assess the robustness of our findings we also examine whether treatment effects are moderated by respondent characteristics.

Figures 1.1 to 1.3 show for each country – Costa Rica, Nicaragua, and Vietnam – the marginal effect associated with each attribute on the probability that an individual chose the specific partner country profile. Horizontal lines represent the 95% confidence intervals. Each attribute can be interpreted relative to the (omitted) baseline category, which is depicted as the dot on the vertical zero line.

The results show that individuals in the three countries hold similar preferences with respect to potential PTA partners, despite different country contexts. Starting with the gravity model, it turns out that considerations related to distance do not affect

individuals' evaluation of potential PTA partners. Only in Vietnam do we observe a negative and statistically almost significant effect of the largest distance on PTA partner choice, as suggested by the theoretical argument. The second element of the gravity model, economic size, affects individual preferences as predicted by hypothesis 1. In all of our country samples, we observe that larger economies and economies of the same size (with the exception of Costa Rica, where the effect does not quite reach standard significance levels) are preferred over smaller economies. Larger economic size increases the probability of choosing the respective country by 7 percentage points in the case of Costa Rica and 10.7 percentage points in the case of Nicaragua. The findings support our hypothesis that individuals should opt for larger economies because of reasons related to comparative advantage and economic gains through increased consumption possibilities and access to larger export markets.

Figures 1.1 to 1.3 about here

In line with hypothesis 2, increases in psychic distance reduce support for a potential trade partner. With the exception of Vietnam, support drops if the potential partner country has a different culture: by about 4 percentage points in Nicaragua and 5 percentage points in Costa Rica. The effects of psychic distance in the case of religion are even more pronounced. Support increases by 17.8 percentage points in Costa Rica if the country is dominated by a Christian tradition, relative to the baseline category of countries with an Islamic religious tradition. The increase is 12.8 percentage points in Nicaragua, all else equal. The effect of Buddhism in the case of Vietnam is even more prominent: it amounts to 27.3 percentage points. Interestingly, in all three countries individuals also prefer countries with a diverse religious background to countries with an Islamic background. In Nicaragua individual level support for countries with a diverse religious background is even higher (17.2 percentage points) than for countries with a Christian tradition. However, since the confidence intervals of both effects overlap we cannot infer, at a statistically significant level, that citizens indeed prefer religiously diverse over Christian countries in the case of Nicaragua. Only in the case of Vietnam we observe that the effect of a Buddhist religious tradition is significantly larger than the effects of diverse or Christian traditions, which are approximately of similar size.

Political regime type has the second most powerful effect on PTA partner preferences (after religion). In all three countries, including autocratic Vietnam, support increases by a minimum of 10.79 percentage points in Nicaragua to a maximum of 14.7 percentage points in Costa Rica, if the target country is democratic. Interestingly, however, the effect of democracy and semi-democracy does not differ significantly in size in all three countries. While the increase in support for a democratic partner country is always larger than for a semi-democratic partner country, confidence intervals tend to overlap, suggesting that effect sizes do not differ significantly. In our theoretical framework we argued that political regime type should matter for three reasons: shared value systems, rule of law, and relative gains. While in the two democratic countries, Costa Rica and Nicaragua, all three arguments speak in favor of citizens preferring democratic over autocratic partner countries, in Vietnam only the argument on rule of law supports a positive effect of democracy. Consequently, the results for Vietnam suggest that the prospect of greater compliance by democracies (because of their stronger rule of law) outplays a potential psychic distance effect arising from different value systems. In addition, the result for Vietnam could also be due to the fact that the choice of non-democratic PTA partners is rather limited due to the democratization of many former autocracies in recent years, with many of the remaining non-democracies not being very attractive economic partners. The exception is of course China, although China's attractiveness as a PTA partner is likely to suffer because of security rivalries between Vietnam and China (see below).

In line with our theoretical predictions, the effect of being a military ally is strongest in Vietnam (a country that is not an ally loses support by about 5.5 percentage points) and positive but non-significant in Costa Rica. In Nicaragua the effect is negative, as predicted by theory, but not statistically significant from zero. Hence the results support, albeit to a limited degree, the idea that individuals worry that gains from trade could translate into military/security advantages when opting for a PTA partner country that is not a military ally. However, consistent with the country's historical background, we expected the effect to be insignificant in Costa Rica, a country that has had no army since 1949 and has consistently pursued the resolution of conflicts based on international law. In contrast, we expected the effect of non-alliance to be more pronounced in Nicaragua,

which has suffered from foreign (US) military and para-military interventions in the past, and most important in Vietnam, which is located in a region characterized by intense military-security rivalries, notably with China.

Finally, with respect to environmental and labor standards our arguments highlight both positive and negative effects. From an economic point of view, individuals in all countries should prefer partner countries with stricter standards since these standards increase production costs and thus constitute a relative economic advantage for the home country, relative to the PTA partner country. In contrast, viewed from a demand side perspective, whether individuals should push for stricter environmental or labor standards should depend on their home country's level of economic development and its own standards. Following this logic, we should see a positive effect only in the case of Costa Rica, but not so in the case of Nicaragua and Vietnam, both of which compete on prices in labor and natural resource intensive products. The conjoint results, however, show that in all three countries PTA partners with higher environmental and labor standards are more attractive, relative to countries with similar or lower standards. The effects are in the order of four to eight percentage points in all three countries. Although the effect of stronger standards is most pronounced in Costa Rica, in line with hypothesis 5, the confidence intervals again overlap making it impossible to statistically differentiate the effects in the various countries.

Rating task results and predicted PTA partner support

As described in the empirical design section, in addition to asking respondent to choose between two potential partner countries, we asked them to rate each proposed PTA partner on a 1 to 7 scale. These ratings allow us to obtain a more nuanced picture of how strong support for or opposition to specific types of PTA partner countries is. It also helps to assess how consistent respondents are in their choices between the binary choice and the rating task. Detailed results of the rating tasks are shown in Appendix 3.

In addition, the rating results allow for an overall assessment of how much individuals like PTAs in general and certain PTA partner countries more specifically. Figure 2 shows support levels across all potential trade partners in the three countries. We observe that

PTAs are quite popular, in the sense that the proportion of individuals giving responses of six or higher in the rating tasks based on all profiles vary from 37% in Nicaragua, to 30% in Vietnam and Costa Rica. Since the characteristics of PTA partners are randomly assigned, we can interpret these scores as expressing substantial demand for PTAs with other countries, irrespective of the type of country.

Figure 2 about here

Based on the rating estimates, we can generate predicted levels of support for potential trade partners that combine characteristics that appear as explanatory variables in our hypotheses. The overall mean expected value for support on a 0-1 scale is 0.53, 0.61 and 0.58 for Costa Rica, Nicaragua and Vietnam respectively. We now focus on two scenarios. The first scenario corresponds to a country that combines all the characteristics that are least preferred. In this first scenario, the country is relatively far away (more than 10 000 km), is a small economy, has lower labor and environmental standards, is not a military ally and not a democracy, Islam is the predominant religion, and the country is not culturally similar (language for Costa Rica and Nicaragua, or does not celebrate Lunar Year, for Vietnam). Under this scenario, the predicted levels of support are 0.36, 0.51 and 0.43 for Costa Rica, Nicaragua and Vietnam respectively (see Figure 3).

In the second scenario, we assume that the potential trade partner is relatively close by (less than 1 000 km away), is a large economy, has stronger environmental and labor standards, is a military ally and a democracy, Christianity (Buddhism for Vietnam) is the predominant religion, and the country is culturally similar (language for Costa Rica and Nicaragua, or Lunar Year celebration for Vietnam). Here the predicted levels of support for a potential trade agreement almost double to 0.66, 0.69 and 0.74 for Costa Rica, Nicaragua and Vietnam respectively.

Figure 3 about here

Comparison to de facto PTA partner countries

How well do these findings correspond with the actual PTA partners (see Table 3 and Appendix 4) of the three countries? According to our results, respondents in Costa Rica prefer PTA partners where Islam is not the predominant religion, which are not autocracies, which have a similar or larger economic size and higher or similar environmental and labor standards. These findings align quite well with Costa Rica's actual PTA partners, none of which is a Muslim country, only two of which are non-Christian (China and Singapore), and all but China are democracies or semi-democracies. The most important trade partners in terms of volume are the United States, the European Union, and China, all of which are larger economies. PTAs with smaller economies have been signed with other Central American and Caribbean countries, which correspond to characteristics pertaining to cultural similarity and democracy.

Table 3 about here

Respondents in Nicaragua prefer democratic or semi-democratic PTA partners that are not Muslim countries, and that have similar or higher social and environmental standards. These results correspond approximately with the countries with which Nicaragua has PTAs or is in the process of establishing PTAs. Notable exceptions are Cuba (autocracy), Chinese Taipei, and the Caribbean islands of Antigua and Barbuda, St. Vincent and the Grenadines and Dominica (small economies and not Spanish speaking).

Vietnamese respondents prefer PTA partners that are not autocracies, have higher environmental and labor rights standards, and are security allies. Muslim countries, relatively small economies, and countries with lower environmental and workers rights standards are viewed less favorably. Interestingly, Vietnam's current PTAs and PTAs under negotiation include several countries that do not align with these characteristics. For example, Belarus, China, and Kazakhstan are autocracies, while several of the current or potential partners in PTAs are countries that are predominantly Muslim.

Robustness checks

None of our hypotheses claims that there are interaction effects between partner country attributes and respondent characteristics. However, as a robustness check, we examined whether the effects of the attributes in our conjoint experiments change substantively when we split the samples along the lines of education and income. We chose these two variables because trade preferences typically vary according to a person's education (or skill level) and her income (Hainmueller and Hiscox 2006; Schaffer and Spilker n.d.; Scheve and Slaughter 2001). As shown in Appendix 5, the estimated effects are similar across the different subsamples, which increases confidence in the robustness of our results.

Discussion and Conclusion

What makes a country a potentially attractive PTA partner? While we know from macro-level studies on advanced industrialized countries that governments tend to opt, on average, for democratic, culturally similar, and economically larger trade partners, this study is the first to provide insights into how citizens in developing countries evaluate potential PTA partners.

Even though PTA partners are selected by governments, understanding the preferences of individual citizens is important for normative and analytical reasons. Normatively, we should be interested in what citizens prefer, and in whether, especially in democratic countries, governments take decisions that are in line with citizens' preferences. Analytically, research on citizens' preferences can complement macro-level research and uncover interesting differences between the two levels. For instance, our results provide indirect evidence that democratic governments indeed take decisions that are closer to the median voter's preferences with respect to PTA partners. In both Costa Rica and Nicaragua, actual PTA partners align quite well with voter preferences, whereas in Vietnam, the sole autocratic country in our sample, PTA partner choices are more distant from the preferences of citizens.

More generally, our results show that despite different country contexts citizens in all three countries hold surprisingly similar preferences when it comes to PTA partner

choices. While we expected individuals to react similarly with regard to factors such as economic size and distance, we expected the country context to matter more for the effect of the political system, and environmental and labor standards. Interestingly, however, we observe that individuals in poorer and rapidly growing countries, such as Vietnam and Nicaragua, prefer trade with countries that have higher environmental and labor standards. Similarly, not only do respondents in Costa Rica and Nicaragua prefer PTAs with (other) democratic countries. Also respondents in Vietnam – an autocracy – opt for democratic PTA partner countries. These results suggest that, in contrast to arguments on post-material value systems (Anderson 1997; Franzen and Meyer 2010; Inglehart 1995; 1997), public demand for standards concerning political participation as well as environment and social rights is present and significant not only in industrialized countries, but also in developing nations.

Furthermore, our results add to a growing debate on whether individuals base their trade preferences mainly on economic self-interest or on other, non-economic factors. While our results indicate that economic factors such as a partner's economic size are important, other partner characteristics such as cultural similarity, the political system, and environmental and labor standards clearly outweigh economic considerations. These findings support the view that individuals are not merely pocket-book maximizing and thus highlight the need for exploring sources other than economic self-interest when explaining individual trade preferences (Fordham and Kleinberg 2012; Rho and Tomz 2012).

Finally, the research reported in this paper underscores the importance of unpacking, both in theoretical and empirical terms, the multidimensionality inherent in many policy choices, including those in the realm of international trade. Choosing one PTA partner over another involves weighing several characteristics of the potential trade partner against one another. Our empirical findings, which are based on an experimental approach, in fact show that PTA partner choice cannot be boiled down to one factor alone. Rather, it is the presence of several characteristics, such as economic size, the political system, or cultural similarity, that induce support levels for potential partners and generate variation reaching from a low of 36 percent to a high of 74 percent. This finding is also important news for policy makers because it shows that trade agreements

can, in spite of widespread skepticism against trade liberalization and economic globalization, achieve very high support levels.

We are well aware that our analysis only covers one side of the story. Support for a potential PTA will not only depend on the respective partner country, but also on the content of the agreement. However, including both country characteristics and PTA contents into one experimental design is hardly feasible. The reason is that a conjoint experiment with potentially a dozen or more attributes describing both country and agreement characteristics would require respondents to make assessments that are, in terms of cognitive requirements, extremely complex. Future research should thus complement the work reported in this paper and analyze PTA content features that affect public support. This will eventually allow for comparison of whether one or the other category of attributes matters more, and which attributes matter most overall.

References

- Anderson, Kym. 1997. "Social Policy Dimensions of Economic Integration: Environmental and Labor Standards." In *Regionalism Versus Multilateral Trade Arrangements*, eds. Takatoshi Ito and Anne O Krueger. Chicago: University of Chicago Press, 57–90.
- Baccini, Leonardo, and Andreas Dür. 2012. "The New Regionalism and Policy Interdependence." *British Journal of Political Science* 42(1): 57–79.
- Baier, Scott L, and Jeffrey H Bergstrand. 2004. "Economic Determinants of Free Trade Agreements." *Journal of International Economics* 64(1): 29–63.
- Baier, Scott L, Jeffrey H Bergstrand, and Matthew W Clance. 2014. "Preliminary Examination of Heterogeneous Effects of Free Trade Agreements." In *Trade Cooperation: the Purpose, Design and Effects of Preferential Trade Agreements*, eds. Andreas Dür and Manfred Elsig. Cambridge: Cambridge University Press, 1–28.
- Baker, Andy. 2003. "Why Is Trade Reform So Popular in Latin America? a Consumption-Based Theory of Trade." *World Politics* 55: 423–55.
- Baker, Andy. 2005. "Who Wants to Globalize? Consumer Tastes and Labor Markets in a Theory of Trade Policy Beliefs." *American Journal of Political Science* 49: 924–38.
- Baldwin, Richard E. 2011. *21st Century Regionalism: Filling the Gap Between 21st Century Trade and 20th Century Trade Rules*. WTO Staff working paper ERSD.
- Beaulieu, Eugene. 2002. "Factor or Industry Cleavages in Trade Policy? an Empirical Analysis of the Stolper–Samuelson Theorem." *Economics & Politics* 14(2): 99–131.
- Beaulieu, Eugene, Ravindra A Yatawara, and Wei Guo Wang. 2005. "Who Supports Free Trade in Latin America?." *The World Economy* 28(7): 941–58.
- Bechtel, Michael M, Thomas Bernauer, and Reto Meyer. 2012. "The Green Side of Protectionism: Environmental Concerns and Three Facets of Trade Policy Preferences." *Review of International Political Economy* 19(5): 837–66.
- Bernauer, Thomas, and Ladina Caduff. 2004. "In Whose Interest? Pressure Group Politics, Economic Competition and Environmental Regulation." *Journal of Public Policy* 24(01): 99–126.
- Bernauer, Thomas, and Tobias Böhmelt. 2013. "Are Economically 'Kinder, Gentler Societies' Also Greener?." *Environmental Science & Technology* 47(21): 11993–2001.
- Blonigen, Bruce A. 2011. "Revisiting the Evidence on Trade Policy Preferences." *Journal of International Economics* 85(1): 129–35.

- Blonigen, Bruce Aloysius. 2008. "New Evidence on the Formation of Trade Policy Preferences." *NBER Working Paper* (14627): 39.
- Caves, Richard E, Jeffrey A Frankel, and Ronald Winthrop Jones. 2007. *World Trade and Payments*. Addison-Wesley Longman.
- CIA. 2014. Central Intelligence Agency *The World Factbook*. Central Intelligence Agency.
- Cottier, T. 2002. "Trade and Human Rights: a Relationship to Discover." *Journal of International Economic Law* 5(1):111-132.
- Dean, Judith M, Mary E Lovely, and Hua Wang. 2009. "Are Foreign Investors Attracted to Weak Environmental Regulations? Evaluating the Evidence From China." *Journal of Development Economics* 90(1): 1–13.
- Dow, Douglas. 2006. "Factors Moderating the Impact of Psychic Distance: Empirical Tests on Bi-Lateral Trade Flows." *Academy of International Business - AIB*.
- Dow, Douglas, and Amal Karunaratna. 2006. "Developing a Multidimensional Instrument to Measure Psychic Distance Stimuli." *Journal of International Business Studies* 37(5): 578–602.
- Drezner, Daniel W. 2008. "The Realist Tradition in American Public Opinion." *Perspectives on Politics* 6(01).
- Dür, Andreas, Leonardo Baccini, and Manfred Elsig. 2013. "The Design of International Trade Agreements: Introducing a New Dataset." *The Review of International Organizations*: 1–23.
- Egger, Peter, and Mario Larch. 2008. "Interdependent Preferential Trade Agreement Memberships: an Empirical Analysis." *Journal of International Economics* 76(2): 384–99.
- EPI. 2014. *Environmental Performance Index*. Yale University.
- Ferrantino, Michael J. 1997. "International Trade, Environmental Quality and Public Policy." *The World Economy* 20(1): 43–72.
- Fordham, Benjamin O, and Katja B Kleinberg. 2011. "International Trade and US Relations with China." *Foreign Policy Analysis* 7(3): 217–36.
- Fordham, Benjamin O, and Katja B Kleinberg. 2012. "How Can Economic Interests Influence Support for Free Trade?." *International Organization* 66(02): 311–28.
- Frankel, Jeffrey A, Ernesto Stein, and Shang-Jin Wei. 1998. "Continental Trading Blocs: Are They Natural or Supernatural?." In *The Regionalization of the World Economy*, ed. Jeffrey A Frankel. University of Chicago Press, 91–120.

- Franzen, A, and R Meyer. 2010. "Environmental Attitudes in Cross-National Perspective: a Multilevel Analysis of the ISSP 1993 and 2000." *European Sociological Review* 26(2): 219–34.
- Gabel, Matthew. 1998. "Public Support for European Integration: an Empirical Test of Five Theories." *Journal of Politics* 60(02): 333–54.
- Gowa, Joanne, and Edward D Mansfield. 1993. "Power Politics and International Trade.." *American political science review* 87(02): 408–20.
- Green, Paul, Abba M Krieger, and Yoram Wind. 2001. "Thirty Years of Conjoint Analysis: Reflections and Prospects." *Interfaces* 31(3 supplement): S56–S73.
- Grieco, Joseph M. 1988. "Realist Theory and the Problem of International Cooperation: Analysis with an Amended Prisoner's Dilemma Model." *Journal of Politics* 50(03): 600–624.
- Grossman, Gene M, and Elhanan Helpman. 1995. "The Politics of Free-Trade Agreements." *The American economic review* 85: 667–90.
- Guisinger, Alexandra. 2009. "Determining Trade Policy: Do Voters Hold Politicians Accountable?." *International Organization* 63(3): 533–57.
- Guiso, Luigi, Paola Sapienza, and Luigi Zingales. 2009. "Cultural Biases in Economic Exchange?." *The Quarterly Journal of Economics* 124(3): 1095–1131.
- Hafner-Burton, Emilie M. 2005. "Trading Human Rights: How Preferential Trade Agreements Influence Government Repression." *International Organization* 59(03): 593–629.
- Hainmueller, J, Daniel J Hopkins, and Teppei Yamamoto. 2014. "Causal Inference in Conjoint Analysis: Understanding Multidimensional Choices via Stated Preference Experiments." *Political Analysis* 22(1): 1–30.
- Hainmueller, Jens, and Michael J Hiscox. 2006. "Learning to Love Globalization: Education and Individual Attitudes Toward International Trade." *International Organization* 60(02): 469–98.
- Hearn, Eddie. 2013. "National Images and Trade Attitudes:an Experimental Examination of Consumer Support for Bilateral Trade." : 1–35. *manuscript*
- Hicks, Raymond, Helen V Milner, and Dustin H Tingley. 2013. "Trade Policy, Economic Interests, and Party Politics in a Developing Country: the Political Economy of CAFTA-DR." *International Studies Quarterly*: n/a–n/a.
<http://onlinelibrary.wiley.com/doi/10.1111/isqu.12057/full>.
- Hooghe, Liesbet, and Gary Marks. 2004. "Does Identity or Economic Rationality Drive Public Opinion on European Integration?." *Political Science and Politics* 37(03):

415–20.

- Hornbeck, J F. 2008. *The Dominican Republic-Central America-United States Free Trade Agreement (CAFTA-DR)*. Washington DC: Congressional Research Service.
- Inglehart, Ronald. 1995. "Public Support for Environmental Protection: Objective Problems and Subjective Values in 43 Societies." *Political Science and Politics* 28(01): 57–72.
- Inglehart, Ronald. 1997. *Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies*. Princeton: Princeton University Press.
- Javorcik, Beata Smarzynska, and Shang-Jin Wei. 2004. "Pollution Havens and Foreign Direct Investment: Dirty Secret or Popular Myth?." *Contributions in Economic Analysis & Policy* 3(2).
- Kaltenthaler, Karl C, and William J Miller. 2013. "Social Psychology and Public Support for Trade Liberalization." *International Studies Quarterly* 57(4): n/a–n/a. <http://onlinelibrary.wiley.com/doi/10.1111/isqu.12083/full>.
- Klein, J G, R Ettenson, and M D Morris. 1998. "The Animosity Model of Foreign Product Purchase: an Empirical Test in the People's Republic of China." *The Journal of Marketing* 62: 89–100.
- Klein, Jill Gabrielle. 2002. "Us Versus Them, or Us Versus Everyone? Delineating Consumer Aversion to Foreign Goods." *Journal of International Business Studies*: 345–63.
- Kono, Daniel Y. 2008. "Does Public Opinion Affect Trade Policy?." *Business and Politics* 10(2).
- Levy, Jack S. 1988. "Domestic Politics and War." *Journal of Interdisciplinary History*: 653–73.
- Li, Quan. 2006. "Democracy, Autocracy, and Tax Incentives to Foreign Direct Investors: a Cross-National Analysis." *Journal of Politics* 68(1): 62–74.
- Liberman, Peter. 1996. "Trading with the Enemy: Security and Relative Economic Gains." *International Security* 21(1): 147–75.
- Linders, G J M, M J Burger, and F G van Oort. 2008. "A Rather Empty World: the Many Faces of Distance and the Persistent Resistance to International Trade." *Cambridge Journal of Regions, Economy and Society* 1(3): 439–58.
- Linders, Gert-Jan M, Sjoerd Beugelsdijk, Henri L F de Groot, and Arjen Slangen. 2005. *Cultural and Institutional Determinants of Bilateral Trade Flows*.
- List, John A, and Catherine Y Co. 2000. "The Effects of Environmental Regulations on

- Foreign Direct Investment.” *Journal of Environmental Economics and Management* 40(1): 1–20.
- Liu, Xuepeng. 2010. “Testing Conflicting Political Economy Theories: Full-Fledged Versus Partial-Scope Regional Trade Agreements.” *Southern Economic Journal* 77(1): 78–103.
- Loan, Nguyen Thi Phuong. 2011. “Problems of Law Enforcement in Vietnam: the Case of Wastewater Management in Can Tho City.” *Center for Development Research (ZEF). Working Paper Series* (53): 1–124.
- Lü, Xiaobo, Kenneth F Scheve, and Matthew J Slaughter. 2012. “Inequity Aversion and the International Distribution of Trade Protection.” *American Journal of Political Science* 56(3): 638–54.
- Mansfield, Edward D, and Diana C Mutz. 2009. “Support for Free Trade: Self-Interest, Sociotropic Politics, and Out-Group Anxiety.” *International Organization* 63(03): 1–34.
- Mansfield, Edward D, and Helen V Milner. 1999. “The New Wave of Regionalism.” *International Organization* 53(3): 589–627.
- Mansfield, Edward D, and Helen V Milner. 2012. *Votes, Vetoes, and the Political Economy of International Trade Agreements*. Princeton University Press.
- Mansfield, Edward D, and Helen V Milner. 2014. “The Political Economy of Preferential Trade Agreements.” In *Trade Cooperation: the Purpose, Design and Effects of Preferential Trade Agreements*, eds. Andreas Dür and Manfred Elsig. Cambridge: Cambridge University Press.
- Mansfield, Edward D, Helen V Milner, and Jon C Pevehouse. 2008. “Democracy, Veto Players and the Depth of Regional Integration.” *The World Economy* 31(1): 67–96.
- Marshall, Monty G, Ted Robert Gurr, and Keith Jagers. 2014. *Polity IV Project*. 4 ed. Center for Systemic Peace.
- Mayda, Anna Maria, and Dani Rodrik. 2005. “Why Are Some People (and Countries) More Protectionist Than Others?.” *European Economic Review* 49(6): 1393–1430.
- Monre. 2014. “Ministry of Natural Resources and Environment of Vietnam.” monre.gov.vn.
- Morrow, James D, Randolph M Siverson, and Tressa E Tabares. 1998. “The Political Determinants of International Trade: the Major Powers, 1907-90.” *American political science review*: 649–61.
- Naoi, Megumi, and Ikuo Kume. 2011. “Explaining Mass Support for Agricultural Protectionism: Evidence From a Survey Experiment During the Global Recession.”

International Organization 65: 771–95.

- Nguyen, Quynh, and Thomas Bernauer. 2014. “Does Social Trust Increase Support for Free Trade? Evidence From a Field Survey Experiment in Vietnam.” *World Trade Institute Working Paper* 2014(13).
- O'Rourke, Kevin H, and Richard Sinnott. 2001. “The Determinants of Individual Trade Policy Preferences: International Survey Evidence.” *Brookings Trade Forum* 2001 2001(1): 157–96.
- Porter, Michael E, Scott Stern, and Michael Green. 2014. *Social Progress Index 2014*. Washington, DC: Social Progress Imperative.
- Prakash, Aseem, and Matthew Potoski. 2006. “Racing to the Bottom? Trade, Environmental Governance, and ISO 14001.” *American Journal of Political Science* 50(2): 350–64.
- Rauch, James E. 1999. “Networks Versus Markets in International Trade.” *Journal of International Economics* 48(1): 7–35.
- Rho, Sungmin, and Michael Tomz. 2012. “Industry, Self-Interest, and Individual Preferences Over Trade Policy.” : 1–25. *manuscript*
- Russett, Bruce M, and John R Oneal. 2001. *Triangulating Peace: Democracy, Interdependence, and International Organizations*. New York: Norton.
- Sala-i-Martin, Xavier, and Klaus Schwab. 2012. *The Global Competitiveness Report 2012–2013*. Geneva: World Economic Forum.
- Sattler, Thomas, and Thomas Bernauer. 2011. “Gravitation or Discrimination? Determinants of Litigation in the World Trade Organisation.” *European Journal of Political Research* 50(2): 143–67.
- Schaffer, Lena Maria, and Gabriele Spilker. “Adding Another Level: Individual Responses to Globalization and Government.” *Political Science Research and Methods*. forthcoming
- Scheve, Kenneth F, and Matthew J Slaughter. 2001. “What Determines Individual Trade-Policy Preferences?.” *Journal of International Economics* 54(2): 267–92.
- Spilker, Gabriele. 2013. *Globalization, Political Institutions and the Environment in Developing Countries*. New York: Routledge.
- Spilker, Gabriele, and Tobias Böhmelt. 2013. “The Impact of Preferential Trade Agreements on Governmental Repression Revisited.” *The Review of International Organizations* 8(3): 343–61.
- Spilker, Gabriele, Lena Maria Schaffer, and Thomas Bernauer. 2012. “Does Social

- Capital Increase Public Support for Economic Globalisation?." *European Journal of Political Research* 51(6): 756–84.
- Strezhnev, Anton, Jens Hainmueller, Daniel J Hopkins, and Teppei Yamamoto. 2013. "Conjoint Survey Design Tool: Software Manual."
- The World Bank. 2014. *World Development Indicators*. Washington D.C: The World Bank.
- Tinbergen, Jan. 1962. "An Analysis of World Trade Flows." In *Shaping the World Economy*, ed. Jan Tinbergen. New York: Twentieth Century Fund, 1–117.
- Tomz, Michael R, and Jessica L Weeks. 2013. "Public Opinion and the Democratic Peace." *American political science review* 107(04): 849–65.
- Umaña, Víctor, Thomas Bernauer, and Gabriele Spilker. 2014. "Natural Trading Partners? a Public Opinion Perspective on Preferential Trade Agreements." In *Trade Cooperation: the Purpose, Design and Effects of Preferential Trade Agreements*, eds. Andreas Dür and Manfred Elsig. Cambridge University Press, 1–22.
- UNDP. 2013. *Human Development Report 2013*. New York: United Nations Development Programme.
- Urbatsch, Robert. 2013. "A Referendum on Trade Theory: Voting on Free Trade in Costa Rica." *International Organization* 67(01): 197–214.
- Verlegh, Peeter WJ, and Jan-Benedict EM Steenkamp. 1999. "A Review and Meta-Analysis of Country-of-Origin Research." *Journal of economic psychology* 20(5): 521–46.
- Vietnam News. 2013. "Environmental Laws Need Improvement." *vietnamnews.vn*. <http://vietnamnews.vn/environment/247164/environmental-laws-need-improvement.html> (May 19, 2014).
- Vogel, David. 1997. "Trading Up and Governing Across: Transnational Governance and Environmental Protection." *Journal of European Public Policy* 4(4): 556–71.
- WTO. 2012. *Nicaragua: Trade Policy Review*. ed. Trade Policy Review Body. Geneva: World Trade Organization.
- WTO. 2013a. *Costa Rica: Trade Policy Review*. ed. Trade Policy Review Body. Geneva: WTO.
- WTO. 2013b. *Vietnam: Trade Policy Review*. ed. Trade Policy Review Body. Geneva: WTO.

Table 1: Differences between Costa Rica, Nicaragua and Vietnam

	Costa Rica	Nicaragua	Vietnam
Political system (a)	Mature democracy	New democracy	One party system (autocracy)
Security setting			
Disputes and security threats (b)	Participates as defendant / plaintiff in border related disputes with Nicaragua.	Participates as defendant or plaintiff in territorial / border disputes with El Salvador, Costa Rica, Colombia and Honduras at the International Court of Justice.	Several border and maritime disputes with China, Cambodia, Laos, Indonesia and Brunei. Conflict with China is of special importance
Military spending 2012 (% of GDP) (b)	n.a.	0.63%	2.37%
Level of economic development			
Human Development Index 2014, ranking (c)	62	129	127
Gross National Income per capita (2005 constant PPP terms) 2012 (d)	\$10,863	\$2,551	\$2,970
Economic openness / trade policy			
GATT/WTO Membership, year of accession (e)	GATT: 1991 WTO: 1995	GATT: 1950 WTO: 1995	WTO: 2005
PTA Partners (e, f, g)	CACM, CARICOM, EU, DR-CAFTA, EFTA, Chile, Colombia, Peru, Canada, Mexico, China, Singapore,	CACM, DR-CAFTA, EU, Chinese Taipei	ASEAN, TPP, China, Japan, Korea, India
Environmental standards			
Environmental Performance Index 2014, ranking (h)	54	90	136
Social standards			
Non-income Human Development Index 2014, ranking (c)	56	129	126
Social progress Index , ranking(i)	25	74	n.d.

Sources:

- (a) Polity IV database (Marshall, Gurr, and Jaggers 2014)(b) The World Factbook (CIA 2014)(c)The Human Development Index (UNDP 2013)(d) World Development Indicators (The World Bank 2014)(e) Costa Rica: Trade Policy Review (WTO 2013a) (f)Nicaragua: Trade Policy Review (WTO 2012)(g) Vietnam: Trade Policy Review(WTO 2013b)(h) Environmental Performance Index (EPI 2014)(i) Social Progress Index Report (Porter, Stern, and Green 2014)

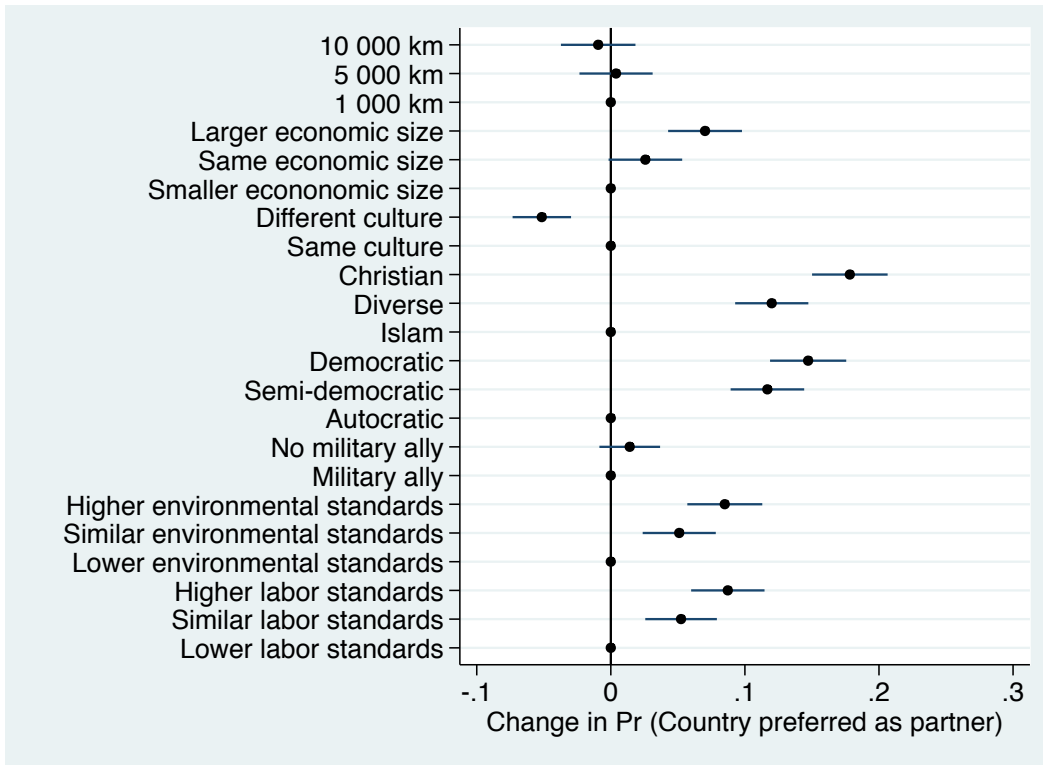
Table 2: Conjoint analysis – attributes and their values

<i>Attribute</i>	<i>Description, attribute values</i>
Size of the economy, compared to [country]	Partner countries may be of different economic size. Their economy may be smaller, of similar size, or larger than the economy of [country]. Values: Larger, same size, smaller
Distance from [capital]	The distance in kilometers between [capital] and the partner country's capital. Values: 1 000 km, 5 000 km, 10 000 km
Spanish (Costa Rica and Nicaragua only)	Spanish may be widely spoken or not widely spoken in partner countries. Values: Spoken by everyone, spoken by many, spoken by few
Lunar New Year (Vietnam only)	This country celebrates or not the Lunar New Year Values: Yes, No
Religion (Costa Rica and Nicaragua only)	Partner countries may have a predominant religion like Christianity or Islam, or may be religiously diverse with several religions practiced. Values: Predominantly Christian, Predominantly Islam, Diverse
Political leaders	The political leaders of partner countries may be chosen by their citizens (voters) through general elections, partly chosen by their citizens (voters) through general elections, or chosen by the ruling political party on its own (no elections). Values: Chosen by citizens (voters) through general elections, Partly chosen by citizens (voters) through general elections, Chosen by the ruling political party on its own (no elections)
Security alliance with [country]	Partner countries may have or may not have a security alliance with [country]. Values: Yes, no
Environmental protection standards, compared to [country]	The environmental protection standards in partner countries may be stronger, similar, or weaker, compared to the standards in [country]. Values: Lower, similar, higher
Worker rights protection standards, compared to [country]	The worker rights protection standards in partner countries may be stronger, similar, or weaker, compared to the standards in [country]. Values: Lower, similar, higher

Table 3 De facto trade partners that match observed individual preferences

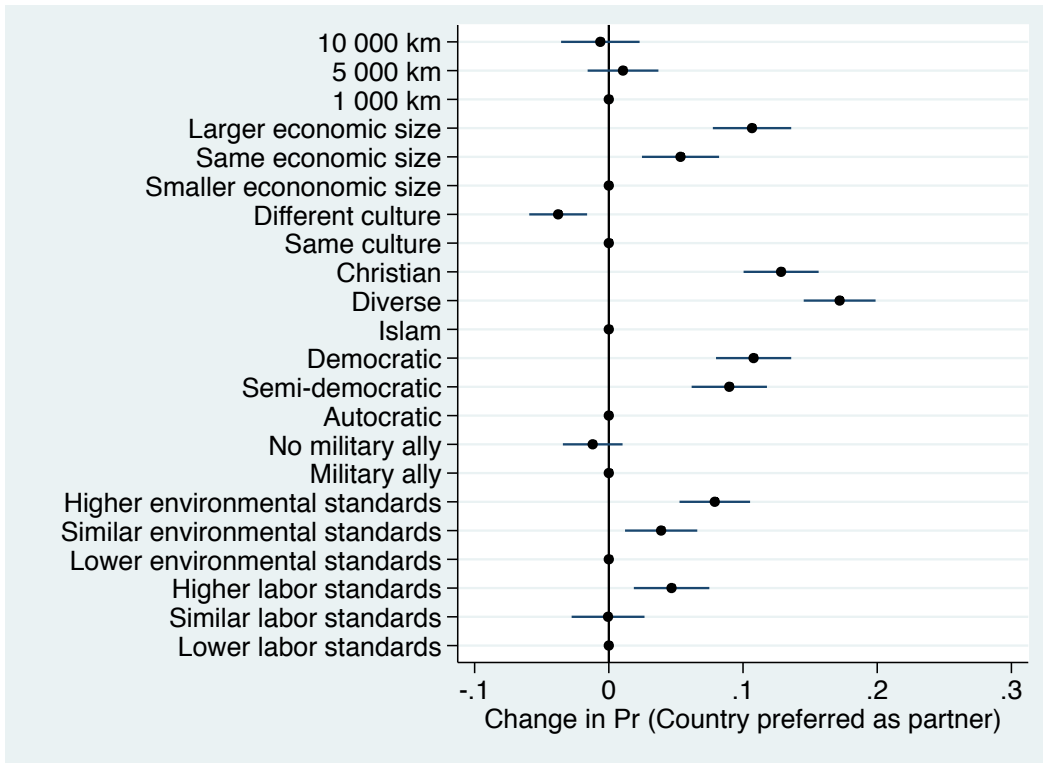
Country	Observed individual preferences	Matching trade partners
Costa Rica	Similar or larger economy Spanish speaking Predominantly non - Muslim Democracy or semi-democracy Similar or higher environmental standards Similar or higher environmental standards	Chile Mexico Peru United States European Union Canada * Singapore * EFTA * * except language
Nicaragua	Similar or larger economy Spanish speaking Predominantly non - Muslim Democracy or semi-democracy Similar or higher environmental standards Similar or higher environmental standards	Chile Mexico United States European Union Central America Chinese Taipei * * except language
Vietnam	Similar or larger economy Predominantly non - Muslim Military ally Democracy or semi-democracy Similar or higher environmental standards Similar or higher environmental standards	Japan Thailand * Philippines * India * Singapore * Australia * New Zealand * Peru * Chile * * except military alliance

Figure 1.1 Results for Costa Rica



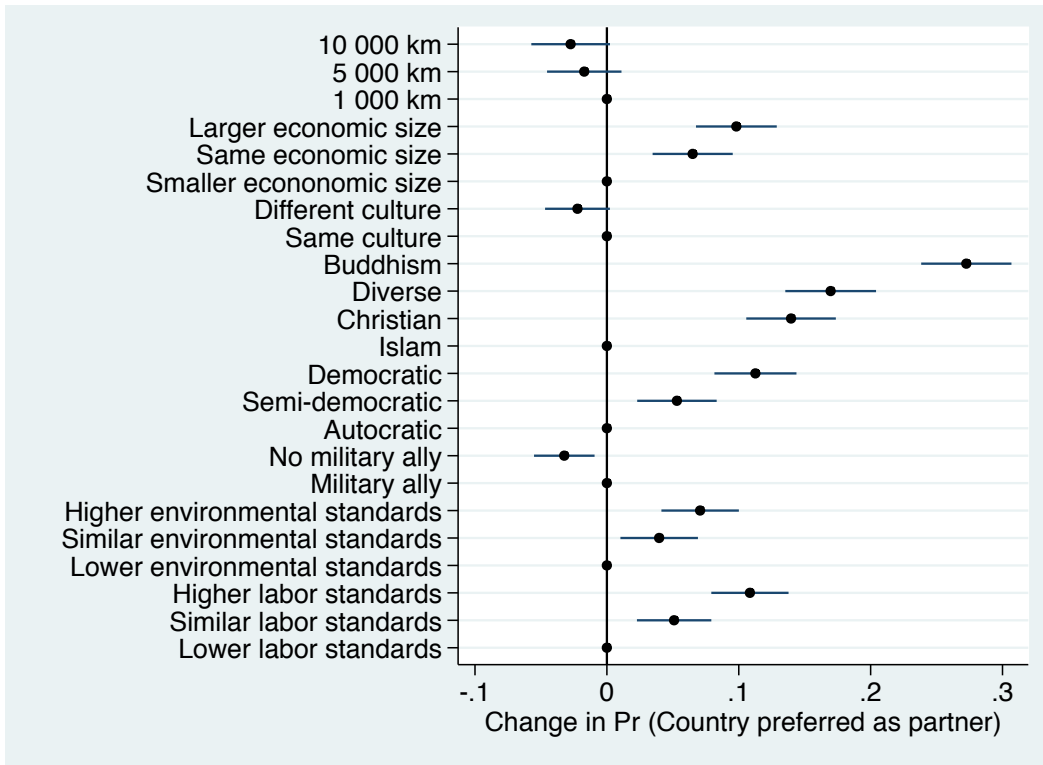
Note: Effects of country characteristics on preference for choosing a trade partner for a PTA. This plot shows estimates of the effects of the randomly assigned country characteristics on the probability of being preferred as trade partner. The dependent variable is a binary “forced choice” indicator in which respondents had to choose between the two countries proposed. Estimates are based on the regression estimators with clustered standard errors; bars represent 95% confidence intervals. The points without horizontal bars denote the attribute value that is the reference category for each attribute.

Figure 1.2 Results for Nicaragua



Note: Effects of country characteristics on preference for choosing a trade partner for a PTA. This plot shows estimates of the effects of the randomly assigned country characteristics on the probability of being preferred as trade partner. The dependent variable is a binary “forced choice” indicator in which respondents had to choose between the two countries proposed. Estimates are based on the regression estimators with clustered standard errors; bars represent 95% confidence intervals. The points without horizontal bars denote the attribute value that is the reference category for each attribute.

Figure 1.3 Results for Vietnam



Note: Effects of country characteristics on preference for choosing a trade partner for a PTA. This plot shows estimates of the effects of the randomly assigned country characteristics on the probability of being preferred as trade partner. The dependent variable is a binary “forced choice” indicator in which respondents had to choose between the two countries proposed. Estimates are based on the regression estimators with clustered standard errors; bars represent 95% confidence intervals. The points without horizontal bars denote the attribute value that is the reference category for each attribute.

Figure 2. Overall support for potential trade partner, rating experiment results

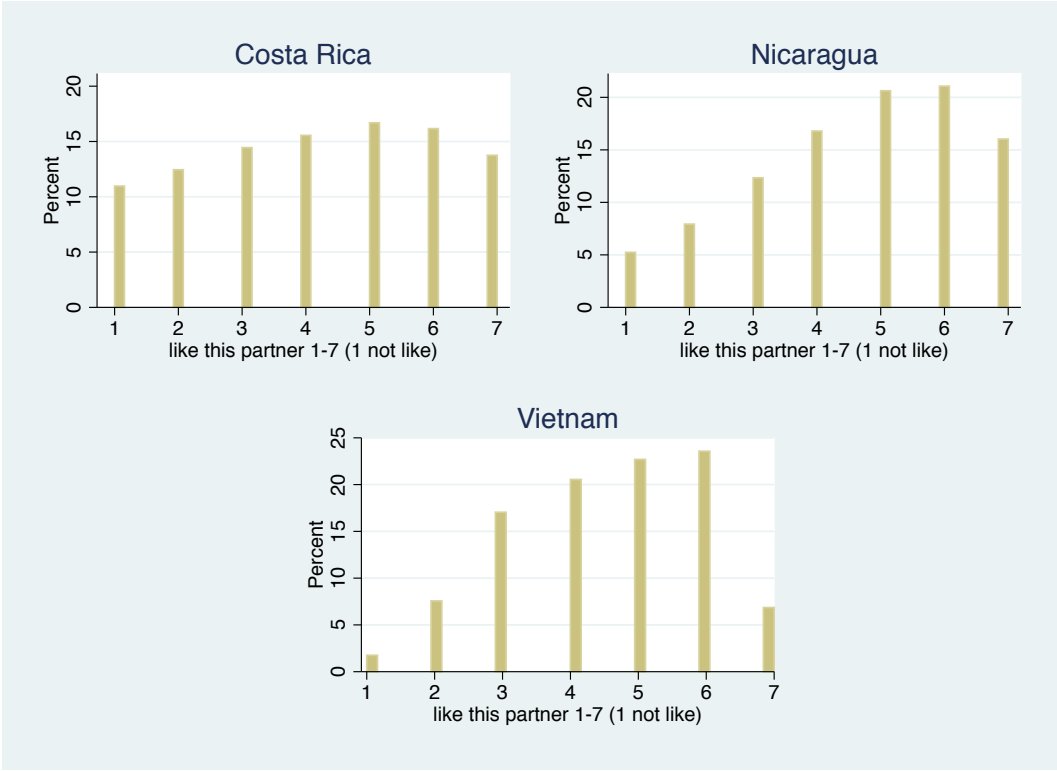
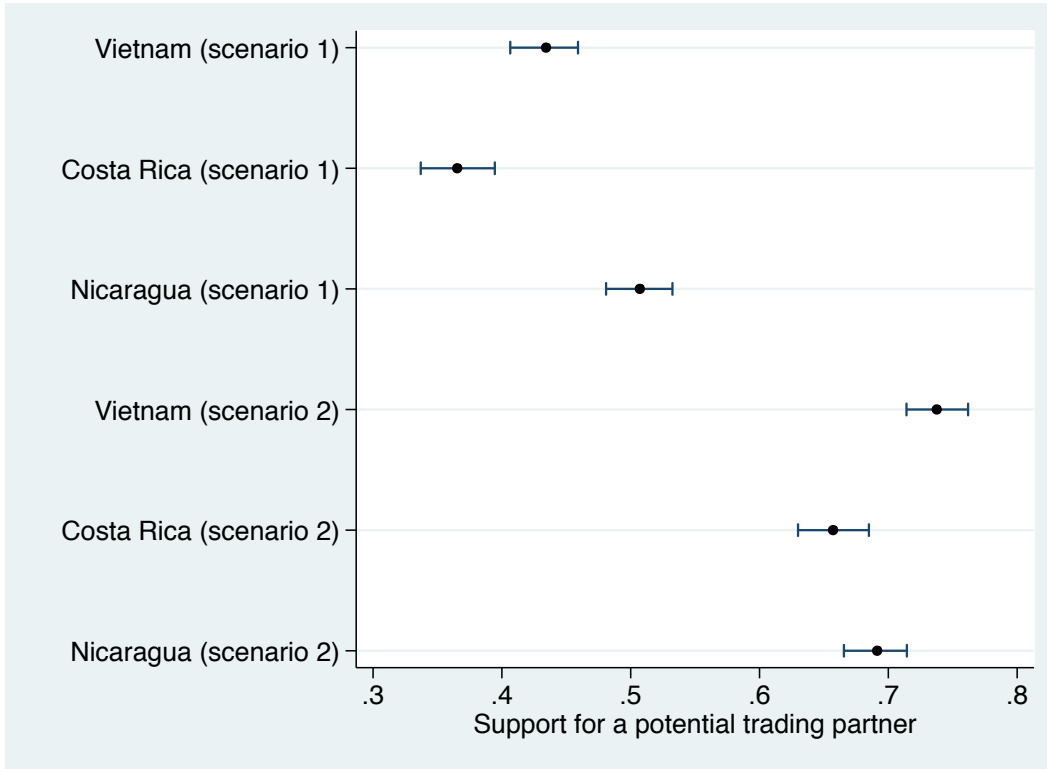


Figure 3 Expected values of support for a potential trade partner



Note: Effects of country characteristics on preference for choosing a trade partner for a PTA. This plot shows expected values of support for a potential trade partner. The dependent variable is the rating of each country profile, rescaled to vary from 0 (“never preferred”) to 1 (“always preferred”). Scenario 1 refers to the least attractive combination of country characteristics and scenario 2 to the most attractive combination of country characteristics. Expected values are based on the regression estimators with clustered standard errors; bars represent 95% confidence intervals. Overall mean expected value for support is 0.53, 0.61 and 0.58 for Costa Rica, Nicaragua and Vietnam respectively.

APPENDIX 1: Basic socio-demographics of our sample and the respective country census

		Sample %	Census %
Costa Rica (2011 Census) n=820	Urban	73.2	72.7
	Rural	27.8	27.2
	Male	50.0	48.9
	Female	50.0	51.0
	Age 18-29	34.0	35.0
	Age 30-39	24.0	24.0
	Age 40-49	20.0	20.0
	Age 50-64	22.0	22.0

Nicaragua (2005 Census) n=800	Urban	66.0	59.0
	Rural	33.0	41.0
	Male	48.4	48.0
	Female	51.6	52.0
	Age 18-29	44.0	43.0
	Age 30-39	26.0	26.0
	Age 40-49	17.0	17.0
	Age 50-64	14.0	14.0

Vietnam (2009 Census) n=700			
Hanoi	Urban	40.9	41.0
	Rural	59.0	59.0
	Male	48.2	48.1
	Female	51.8	51.9
	Age 18-24	22.6	24.4
	Age 24-33	29.5	27.1
	Age 34-44	16.9	19.5
	Age 45-54	19.9	19.1
	Age 55-64	11.1	9.9
Ho Chi Minh City	Urban	78.2	83.3
	Rural	27.1	16.7
	Male	48.9	46.8
	Female	51.0	53.2
	Age 18-24	10.6	24.7
	Age 24-33	27.7	29.5
	Age 34-44	28.3	22.6
	Age 45-54	21.5	16.1
	Age 55-64	12.0	7.0

APPENDIX 2: CONJOINT QUESTIONS

INSTRUCTIONS:

We will now ask you to look at different types of partner countries Vietnam is considering for international trade agreements. You will see two different types of countries side-by-side. Their characteristics differ and you will be asked to tell us which of the two countries you prefer Vietnam to choose for a new trade agreement. Please compare these two countries carefully. They may appear similar but differ in one or more important characteristics.

Characteristic	Country 1	Country 2
Size of the economy, compared to Vietnam	Larger	Same size
Public holiday: Luna New Year	Yes	No
Distance from Hanoi, Vietnam	1 000 km	5 000 km
Religion	Predominantly Buddhism	Predominantly Islam
Political leaders	Chosen by citizens (voters) through general elections	Chosen by the ruling political party on its own (no elections)
Environmental protection standards, compared to Vietnam	Lower	Higher
Worker rights protection standards, compared to Vietnam	Similar	Lower
Security alliance with Vietnam	No	Yes
Which country would you prefer?	<input type="radio"/>	<input type="radio"/>

On a scale from 1 to 7, how much would you support a trade agreement between Vietnam and COUNTRY 1? 1 means that you would not support at all the agreement, and 7 means that you would strongly support the agreement.

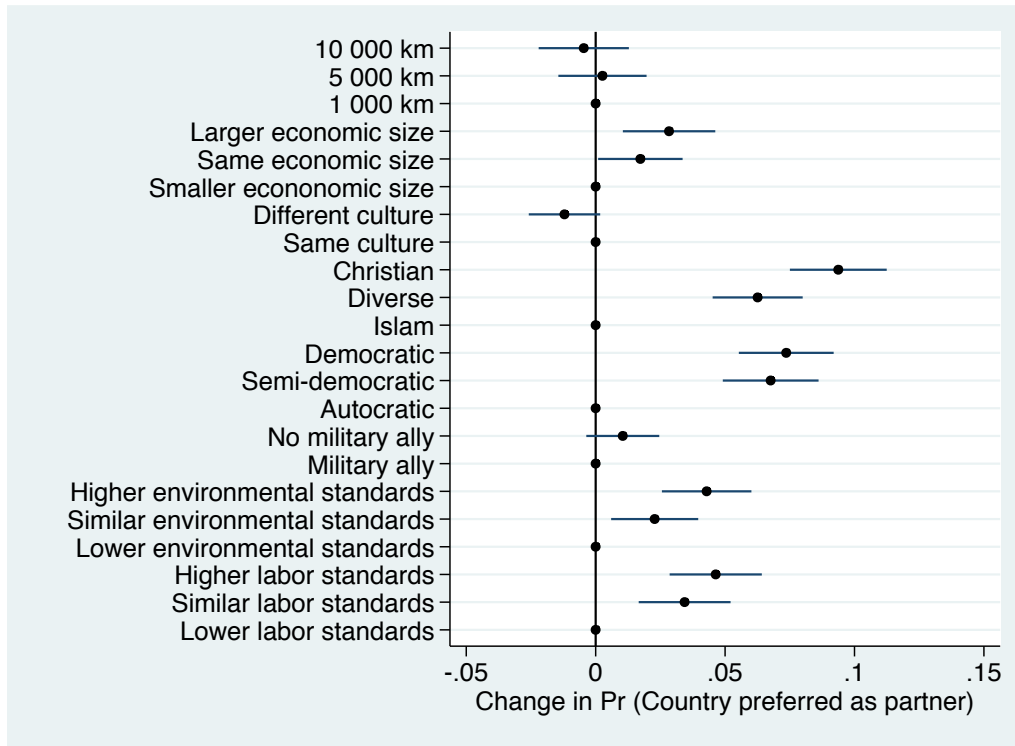
Country 1	1	2	3	4	5	6	7
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not support at all			Strongly support			

On a scale from 1 to 7, how much would you support a trade agreement between Vietnam and COUNTRY 2? 1 means that you would not support at all the agreement, and 7 means that you would strongly support the agreement.

Country 2	1	2	3	4	5	6	7
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not support at all			Strongly support			

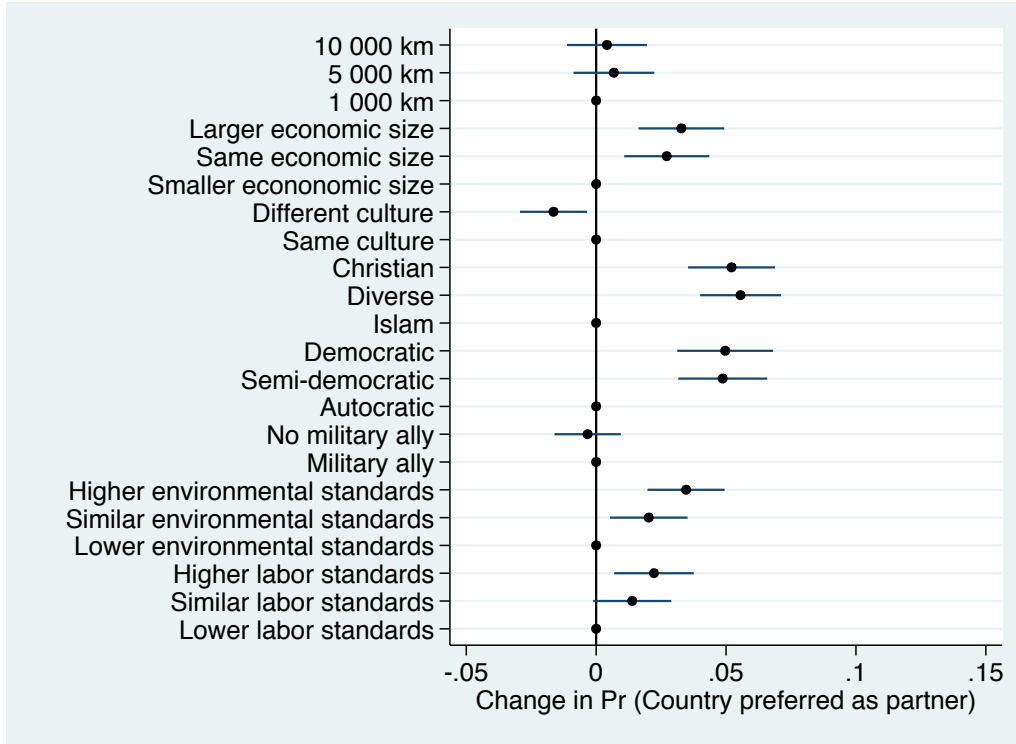
APPENDIX 3: Results of rating task in conjoint experiments

Figure A3.1. Rating task Costa Rica



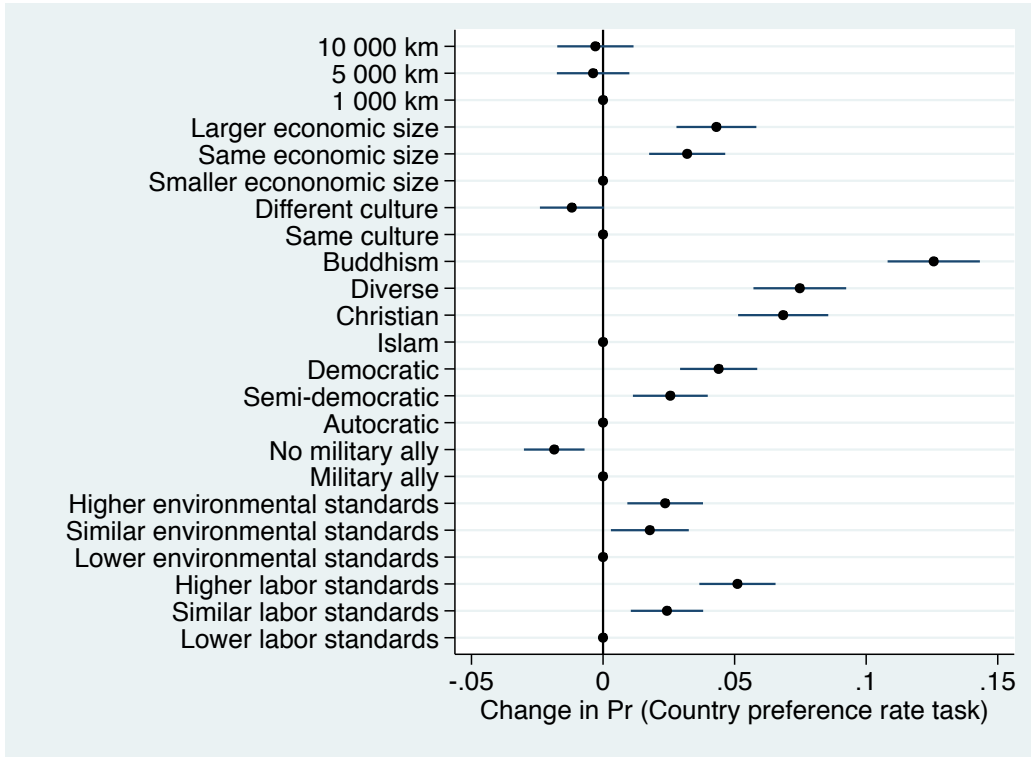
Note: Effects of country characteristics on preference for choosing a trade partner for a PTA. This plot shows estimates of the effects of the randomly assigned country characteristics on the probability of being preferred as trade partner. The dependent variable is the rating of each country profile, rescaled to vary from 0 (“never preferred”) to 1 (“always preferred”). Estimates are based on the regression estimators with clustered standard errors; bars represent 95% confidence intervals. The points without horizontal bars denote the attribute value that is the reference category for each attribute.

Figure A3.2. Rating task Nicaragua



Note: Effects of country characteristics on preference for choosing a trade partner for a PTA. This plot shows estimates of the effects of the randomly assigned country characteristics on the probability of being preferred as trade partner. The dependent variable is the rating of each country profile, rescaled to vary from 0 (“never preferred”) to 1 (“always preferred”). Estimates are based on the regression estimators with clustered standard errors; bars represent 95% confidence intervals. The points without horizontal bars denote the attribute value that is the reference category for each attribute.

Figure A3.3. Rating task Vietnam



Note: Effects of country characteristics on preference for choosing a trade partner for a PTA. This plot shows estimates of the effects of the randomly assigned country characteristics on the probability of being preferred as trade partner. The dependent variable is the rating of each country profile, rescaled to vary from 0 (“never preferred”) to 1 (“always preferred”). Estimates are based on the regression estimators with clustered standard errors; bars represent 95% confidence intervals. The points without horizontal bars denote the attribute value that is the reference category for each attribute.