Selecting Partner Countries for Preferential Trade Agreements

Experimental Evidence 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. In contrast to the World Trade Organization, PTAs discriminate among member countries raising the question which countries are preferred partners. Existing research focuses on the country level, however, we know very little about what types of countries citizens prefer for PTAs. To account for the multidimensionality of partner choice, we develop a corresponding theoretical framework and rely on conjoint experiments embedded in three national surveys in Costa Rica, Nicaragua, and Vietnam. The results show that, despite differing country contexts, citizens in all three countries opt for similar partners. Respondents prefer culturally similar countries, whereas economic size and especially geographic distance are of lesser importance. Notably, even citizens in the poorest and only autocratic of the three countries (Vietnam), opt for countries that are democratic and have high environmental and labor standards.

Word Count: 8496

1 We thank Jessica Fortin-Rittberger and the participants of the Salzburg political science colloquium for their helpful comments. This article was written in the context of the Swiss National Research Program on Trade Regulation.
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. This paper therefore examines what characteristics make countries more (or less) popular as international trade partners viewed from an individual level perspective.

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).

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 experiments in surveys administered to national random samples in three developing countries: Costa Rica, Nicaragua, and Vietnam.

Our empirical results show that individuals in the three countries opt for very similar trade partner countries despite their different home country contexts. Individuals 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, however, since individuals 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 to 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.

The paper contributes in several ways to the growing body of literature that seeks to explain citizens’ trade policy preferences (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; e.g. 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, which focuses on very few highly advanced industrialized countries, above all the United States (Blonigen 2008; 2011; Fordham and Kleinberg 2012; Guisinger 2009; Hainmueller and Hiscox 2006; Mansfield and Mutz 2009; Rho and Tomz 2012; e.g. Scheve and Slaughter 2001). Studying individual trade preferences in Costa Rica, Nicaragua, and Vietnam therefore allows us examining whether and how

---

2 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 2014), 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.
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.

**Trade partner choice – a multidimensional decision**

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**

The most prominent economic explanation of international trade flows – and thus implicitly also of governmental and market choices of trade partner countries – is
reminiscent of gravity in physics and has thus been labeled the gravity model. It explains (at the macro-level) bilateral trade flows in terms of countries’ economic size and their geographic distance: pairs of countries trade more if they are closer to each other in terms of physical distance and if their economies are larger (Tinbergen 1962). Recent studies have extended this model to trade disputes, where dispute incidence has been shown to be a function of economic size (Sattler and Bernauer 2011), and to PTA formation, where PTA formation becomes more likely with growing economic size of at least one country in a dyad and shorter distance between them (Baier and Bergstrand 2004; Baier, Bergstrand, and Clance 2014; Dür, Baccini, and Elsig 2013; Linders, Burger, and van Oort 2008).

At the micro-level both a partner country’s economic size and its geographic distance should be crucial for individual level attitudes because they should transmit important cues about the agreement’s economic benefits. More precisely, we submit that individuals should value economic size when choosing between partner countries since trade with a larger partner country should result in increased consumption possibilities and export opportunities due to the large market of the potential partner country. We thus expect individuals to associate an economically larger partner country with greater economic gains derived from a more diverse and potentially cheaper set of imported goods as well as access to a larger export market for home products (Baker 2003; 2005; Grossman and Helpman 1995). Hence we expect that trade with larger economies should be more attractive than trade with economies of similar size, or with smaller economies –
all else equal.\textsuperscript{3}

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.

\textbf{H1: Individuals should prefer PTAs with larger economies and with geographically more proximate countries.}

\textit{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

\textsuperscript{3} 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.
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 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).

Verlegh and Steenkamp (1999) argue, for instance, that country of origin affects consumer product evaluation through three mechanisms: cognitive, affective and normative. As such,
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.\(^5\) If another country’s population 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).

\(^5\)It should be noted at this point that our empirical analysis captures country characteristics in stylized form, and does 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 in fact shape individual preferences. For instance, if we found a negative reaction of Vietnamese respondents to a proposed PTA with China we would
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 economic exchange between two countries and, as a consequence, also with less positive trade preferences (Kaltenthaler and Miller 2013; 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 should prefer PTAs with countries that are culturally similar.

not learn whether this reaction was due to China’s much larger economic size, security issues, or other factors.
**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 two reasons: common value systems and the respect for the rule of law.

In the case of democracy, 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 in democracies should then prefer trade partners that have the same political institutions, such as free and fair elections, 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 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. However, in the case of autocracies, such as Vietnam, this argument is hardly plausible since it is difficult to imagine what a similar value system should consist of in the case of autocracies.

In contrast, the second argument on why political regime type should matter for trade partner country choice should hold independent of the political system of the home country. It 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.

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 both reasons just outlined: they should view other democracies as sharing a joint value system and they should expect greater compliance by these partners.

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, it is not obvious how citizens in Vietnam should (on average) judge a democratic in contrast to an autocratic partner country. However, if Vietnamese citizens expect greater compliance by democracies (because of stronger rule of law in these countries) they should prefer PTAs with democracies.

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 should 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/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, if citizens are aware or believe that trade can create unequal relative gains that can translate into military 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 should 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**

The increasing prevalence of environmental and social standards in PTAs and the ongoing debates in the WTO on the nexus between trade liberalization, environmental standards, and social policy suggest that governments and presumably also citizens connect these topics. 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).

Social and environmental policies differ quite strongly across countries (Bernauer and Böhmelt 2013). This variation is a function of differences in economic development, factor and 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 grows (Anderson 1997; Bechtel, Bernauer, and Meyer 2012; Ferrantino 1997; Franzen and Meyer 2010; Spilker 2013).

Transferred to the context of PTAs, 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). Hence citizens’ demand for PTA partners with similar or higher environmental and social standards should increase with a country’s economic development. Consequently, 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, however, we need to pay attention to historical and economic contexts and therefore expect some differences between the three countries of interest. 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 M. 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; 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. 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, 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.

Studying PTA partner choices in three developing countries with different country contexts enables us to evaluate how these differences in the political system, the level of environmental and social standards or in their security setting matter for citizens’ preferences. Hence we believe it is interesting, from an academic and a policy-maker’s perspective, to understand how the public views international trade under such different conditions, and whether similar factors, compared to advanced industrialized countries, play a role in shaping public opinion on trade.
<table>
<thead>
<tr>
<th></th>
<th>Costa Rica</th>
<th>Nicaragua</th>
<th>Vietnam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political system (a)</td>
<td>Mature democracy</td>
<td>Democracy</td>
<td>One party system (autocracy)</td>
</tr>
<tr>
<td>Disputes and security</td>
<td>Participates as defendant / plaintiff in border related disputes with Nicaragua.</td>
<td>Participates as defendant or plaintiff in territorial / border disputes with El Salvador, Costa Rica, Colombia and Honduras at the International Court of Justice.</td>
<td>Several border and maritime disputes with China, Cambodia, Laos, Indonesia and Brunei. Conflict with China is of special importance</td>
</tr>
<tr>
<td>threats (b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military spending 2012</td>
<td>n.a.</td>
<td>0.63%</td>
<td>2.37%</td>
</tr>
<tr>
<td>( % of GDP) (b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of economic development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Development</td>
<td>62</td>
<td>129</td>
<td>127</td>
</tr>
<tr>
<td>Index 2014, ranking (c)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross National Income</td>
<td>$10,863</td>
<td>$2,551</td>
<td>$2,970</td>
</tr>
<tr>
<td>per capita (2005 constant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPP terms) 2012 (d)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade policy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of accession (e)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTA Partners (e, f, g)</td>
<td>CACM, CARICOM, EU, DR-CAFTA, EFTA, Chile, Colombia, Peru, Canada, Mexico, China, Singapore,</td>
<td>CACM, DR-CAFTA, EU, Chinese Taipei</td>
<td>ASEAN, TPP, China, Japan, Korea, India</td>
</tr>
<tr>
<td>Environmental standards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Performance</td>
<td>54</td>
<td>90</td>
<td>136</td>
</tr>
<tr>
<td>Index 2014, ranking (h)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social standards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-income Human</td>
<td>56</td>
<td>129</td>
<td>126</td>
</tr>
<tr>
<td>Development Index 2014,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ranking (c)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social progress Index,</td>
<td>25</td>
<td>74</td>
<td>n.d.</td>
</tr>
<tr>
<td>ranking(i)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Differences between Costa Rica, Nicaragua and Vietnam

Sources: a) Polity IV database (Marshall, Jaggers, and Gurr 2006); (b) The World Factbook (CIA 2014); (c) 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)
The three population-based survey experiments 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 (Author 2014) the socio-demographics of these two areas are very similar to the socio-demographics of the entire country.

Environmental Performance Index (EPI 2014); (i) Social Progress Index Report (Porter, Stern, and M. Green 2014).

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).

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 were selected. First, districts were selected according to populated areas within each region/city, using systematic random selection with probability proportional to size. 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
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 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.

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 researcher can identify the causal effect – the Average Marginal Component age quotas were used to generate a sample that is similar to the national distribution on these two variables. Appendix 1 shows socio-demographic data and its comparison with census figures.
Effect (ACME) – of each attribute value on the probability that a particular profile will be chosen (Hainmueller, Hopkins, and Yamamoto 2014).

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: Conjoint analysis – attributes and their values

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description, attribute values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of the economy</td>
<td>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</td>
</tr>
<tr>
<td>Distance from</td>
<td>The distance in kilometers between [capital] and the partner country’s capital. Values: 1 000 km, 5 000 km, 10 000 km</td>
</tr>
<tr>
<td>Spanish (Costa Rica and Nicaragua only)</td>
<td>Spanish may be widely spoken or not widely spoken in partner countries. Values: Spoken by everyone, spoken by many, spoken by few</td>
</tr>
<tr>
<td>Lunar New Year (Vietnam only)</td>
<td>This country celebrates or not the Lunar New Year</td>
</tr>
<tr>
<td>Religion (Costa Rica and Nicaragua only)</td>
<td>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</td>
</tr>
<tr>
<td>Political leaders</td>
<td>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)</td>
</tr>
<tr>
<td>Security alliance</td>
<td>Partner countries may have or may not have a security alliance with [country]. Values: Yes, no</td>
</tr>
<tr>
<td>Environmental protection standards</td>
<td>The environmental protection standards in partner countries may be stronger, similar, or weaker, compared to the standards in [country]. Values: Lower, similar, higher</td>
</tr>
<tr>
<td>Worker rights protection standards</td>
<td>The worker rights protection standards in partner countries may be stronger, similar, or weaker, compared to the standards in [country]. Values: Lower, similar, higher</td>
</tr>
</tbody>
</table>
The conjoint part of the survey started with a short introductory text 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 (further details in Appendix 2). Using this setup, the unit of analysis is the country profile with a maximum of 2 profiles * 5 choice tasks * # respondents; i.e. 8200 observations 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.

9 “[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.”
Results

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 variables measuring consumer gains, 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 theory. The second attribute measuring consumer gains, 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) are preferred over smaller economies. Larger economic size increases the probability of choosing the respective country by 7 percentage points in Costa Rica and 10.7 percentage points in Nicaragua. The findings support our hypothesis that individuals should opt for larger economies because larger economies are related with economic gains through increased consumption possibilities and access to larger export markets.
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. 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 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.

In our theoretical framework we argued that political regime type should matter for two reasons: shared value systems and the rule of law. While in the two democratic countries, Costa Rica and Nicaragua, both 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 are in line with the interpretation that the prospect of greater compliance by democracies (because of their stronger rule of law) makes them more attractive trade partners than autocracies.
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).

Concerning the effect of military alliances, we expect a country’s historical background to mediate the effect. In Costa Rica, a country that has had no army since 1949 and has consistently pursued the resolution of conflicts based on international law, we expect the effect of non-alliance to be insignificant while it should be more pronounced in Nicaragua, which has suffered from foreign (US) military and para-military interventions in the past. The effect should be strongest in Vietnam, which is
located in a region characterized by intense military-security rivalries, notably with China. The empirical results closely match the expected pattern: 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.

Finally, with respect to environmental and labor standards, we argue that it should depend on the level of economic development and the standards of the individuals’ home country whether citizens should demand stricter environmental or labor standards. Following this logic, we should see a positive effect only in Costa Rica, but not in 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, thus supporting hypothesis 5, the confidence intervals again overlap making it impossible to statistically differentiate the effects in the various countries.
Rating 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 permits assessing 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. While they are in line with the results of the binary choice task and therefore highlight the robustness of our results, they also provide additional information. Most importantly, 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.
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.\(^\text{11}\) In Figure 3, we therefore plot two ideal type scenarios: scenario one corresponds to a PTA partner that combines all the characteristics that are least preferred\(^\text{12}\) and scenario 2 corresponds to a PTA partner that combines all the

---

\(^{10}\) Expected values are based on the regression estimators with clustered standard errors; bars represent 95% confidence intervals. The dependent variable is the rating of each country profile.

\(^{11}\) 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.

\(^{12}\) Here 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
characteristics that are most preferred. Plotting these two ideal type scenarios against each other shows how much support for a potential trade agreement depends on the specific country characteristics. In the worst-case scenario (scenario one), the predicted levels of support are only 0.36, 0.51 and 0.43 for Costa Rica, Nicaragua and Vietnam respectively (see Figure 3). In contrast, the predicted levels of support for a potential trade agreement increase drastically for the most preferred partners (scenario two) to 0.66, 0.69 and 0.74 for Costa Rica, Nicaragua and Vietnam respectively.

Robustness checks

To further illustrate the substantive meaning of our results, we present in Appendix 4 a comparison of how well our findings correspond with the actual PTA partners of the three countries. These comparisons show that 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.

None of our hypotheses claims that there are interaction effects between partner country attributes and respondent characteristics. However, as a robustness check, we

---

13 Here 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).
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 2014; 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.

In addition, we provide the results split according to whether a person perceives trade policy as a salient issue.14 While we intended in our empirical set-up to explain the exact meaning of a trade agreement and the various attributes of our conjoint experiment, choosing one trade partner of another is still a complex choice. However, Figures A5.7 to A5.9 show that individuals choose similar trading partners independent of whether they perceive trade to be an important topic or not.15 We perceive this to underline the validity of our results since independent of their knowledge people understand our choice task in a similar way.

Finally, data generated by the rating task allows us to check whether respondents provide consistent answers across the binary choice and rating tasks. To be consistent, a respondent who ranks a country of type A over type B in the binary choice task should also assign a higher rating to A than to B. To check whether respondents indeed provided

---

14 The exact question text is: How much had you thought about international trade issues before today?

15 The only exception is Vietnam in which the group of individuals who perceive trade to be a salient issue is very small which results in large confidence intervals.
consistent answers, we analyzed the proportion of inconsistencies across the three samples. In the Vietnamese sample, we do not observe any inconsistent ratings. In Costa Rica the inconsistency rate is 1.34%, and in Nicaragua 6%. However, our main results do not change when we drop these observations.

**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 example, our results show that individuals in line with governments tend to also prefer democratic, culturally more similar and economically larger countries. However, in contrast to governments’ priorities in developing countries (Anderson 1997; Franzen and Meyer 2010; Spilker 2013) environmental and social standards rank high in individual level perceptions.

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 are at least as important. 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.
References


Li, Quan. 2006. “Democracy, Autocracy, and Tax Incentives to Foreign Direct Investors:


Nguyen, Quynh, and Thomas Bernauer. 2014. “Does Social Trust increase Support for Free Trade? Evidence from a Field Survey Experiment in Vietnam.” *World Trade*


Development Programme.


