

# Natural Trading Partners?

## A Public Opinion Perspective on Preferential Trade Agreements

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# Research question

What characteristics make other countries more (or less) attractive when citizens evaluate the pros and cons of PTAs?

# Why focus on the micro-level?

- Public opinion is a critical factor in the trade liberalization process
- Voters' preferences are important in influencing government choices concerning trade policy
- PTAs have become a source of political contestation.

## Examples:

- National elections with trade as dividing issue (e.g. Canada 1988, Costa Rica 2006)
- Referenda on trade agreements (e.g. EU, Switzerland, Costa Rica)

# PTAs are important, prominent and prolific

- PTAs are important, notably for addressing global value chain challenges related to behind the border barriers (BBBs).
- One of the most prominent forms of international cooperation today
- Modern PTAs are deeper and wider than WTO agreements
- PTAs cover ca. 40% of total trade in goods
- PTA number has quadrupled over the last 20 years.

# Literature

- PTA formation (macro level)
  - Country characteristics measured at the dyadic level (size, intensity of trade, geographic distance, political system)
  - Explanations based on exchange of market access commitments and economic groups
  - Make important but untested assumptions about preferences and beliefs of individuals
- Individual preferences towards trade (micro level)
  - Literature only studies individual attitudes toward trade in general (free trade vs. protectionism), but does not differentiate between different forms of trade liberalization
  - Data is taken from standard surveys, such as the ANES or the Eurobarometer

## Standard Surveys

- Questions in most surveys take the form of ‘do you oppose’ or ‘do you favor’ trade liberalization
- Presenting the issue as a dichotomy could be deceiving as it may provide a magnified sense of division among the voters.
- Ignores multidimensional nature of trade policies

# Multidimensional decision-making

- Trade policy is multidimensional and entails a bundle of different features.
- Several attributes of PTAs in combination may affect citizens' preferences (citizens are likely to make trade-offs over different PTA features), e.g.
  - Number of PTA member countries
  - Partner country characteristics
  - Sectoral coverage
  - Trade related provisions
  - Non-trade concerns

# Theory

We examine the micro-level implications of trade models, notably those concerning:

- Geographic and economic proximity
- Psychic distance
- Political system similarity
- Post-materialist preferences



## Geographic and economic proximity

- Pairs of countries have a higher probability of forming a PTA – or enlarging an existing one when they:
  - Are geographically close to each other,
  - have a large GDP, and
  - their economic size is similar

➔ We expect individuals to prefer PTAs with countries that are geographically closer and similar in economic size.

# Psychic distance

- Trade policy as well as transportation and other logistical costs do not fully explain bilateral trade flows.
- Trade may be hampered by intangible barriers based on cultural and institutional differences between countries (psychic distance).
- Language and religion are likely to be key facets of psychic distance
  - Reduce the flow of information between groups, have significant effects on bilateral trust and thus increase the costs and risks of economic transactions.



We expect individuals to prefer PTAs with countries that are more similar in terms of language and religion.

## Political system

- Democracies are more likely to form PTAs among themselves (e.g. Milner and Mansfield 2012, Milner and Kubota 2005)
- Democratic institutions are likely to constrain the ability of governments to use trade barriers as a strategy for generating political support.
- Democratization tends to empower new groups of voters who prefer less protectionism.

 We expect citizens in democratic countries to favor PTAs with other democratic countries.

# Post-materialism

- Modern PTAs are increasingly dealing with environmental and social issues as well.
- These issues are covered by the multilateral trading rules only at the margin.
- In advanced democracies, such postmaterial concerns play an important role in trade policy choices of governments.

➔ We expect individuals in advanced industrialized democracies to prefer PTAs with countries that have similar or higher environmental and labor rights standards.

# Empirical study design

- Choice-based conjoint analysis
- Experimental technique for studying situations in which a decision-maker (voter, firm representative, consumer) is facing options that simultaneously vary across two or more attributes (Green et al. 2001)
- 412 US respondents recruited via Amazon Mechanical Turk (fielded in August 2013). This approach is fine as long as the treatment effects of interest to us are not mediated by characteristics of respondents on which the sample differs strongly compared to the respective national distribution.

The country varies on 7 dimensions or attributes

# How it works ?

We confront individuals with potential trading partners profiles presented side-by-side

We now ask you to look at different types of partner countries the United States 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 the United States to select for a new trade agreement.

Attribute values are inserted randomly

| Characteristics                 | Country 1             | Country 2             |
|---------------------------------|-----------------------|-----------------------|
| Religion                        | Christian             | Islam                 |
| Labor standards                 | similar               | stronger              |
| Country size                    | considerably smaller  | considerably smaller  |
| Language                        | other                 | other                 |
| Political system                | democracy             | democracy             |
| Location                        | in America            | in Oceania            |
| Environmental standards         | weaker                | weaker                |
| Which country would you prefer? | <input type="radio"/> | <input type="radio"/> |

Each individual gets 6 choice tasks

Respondents make a choice

## Attributes and values

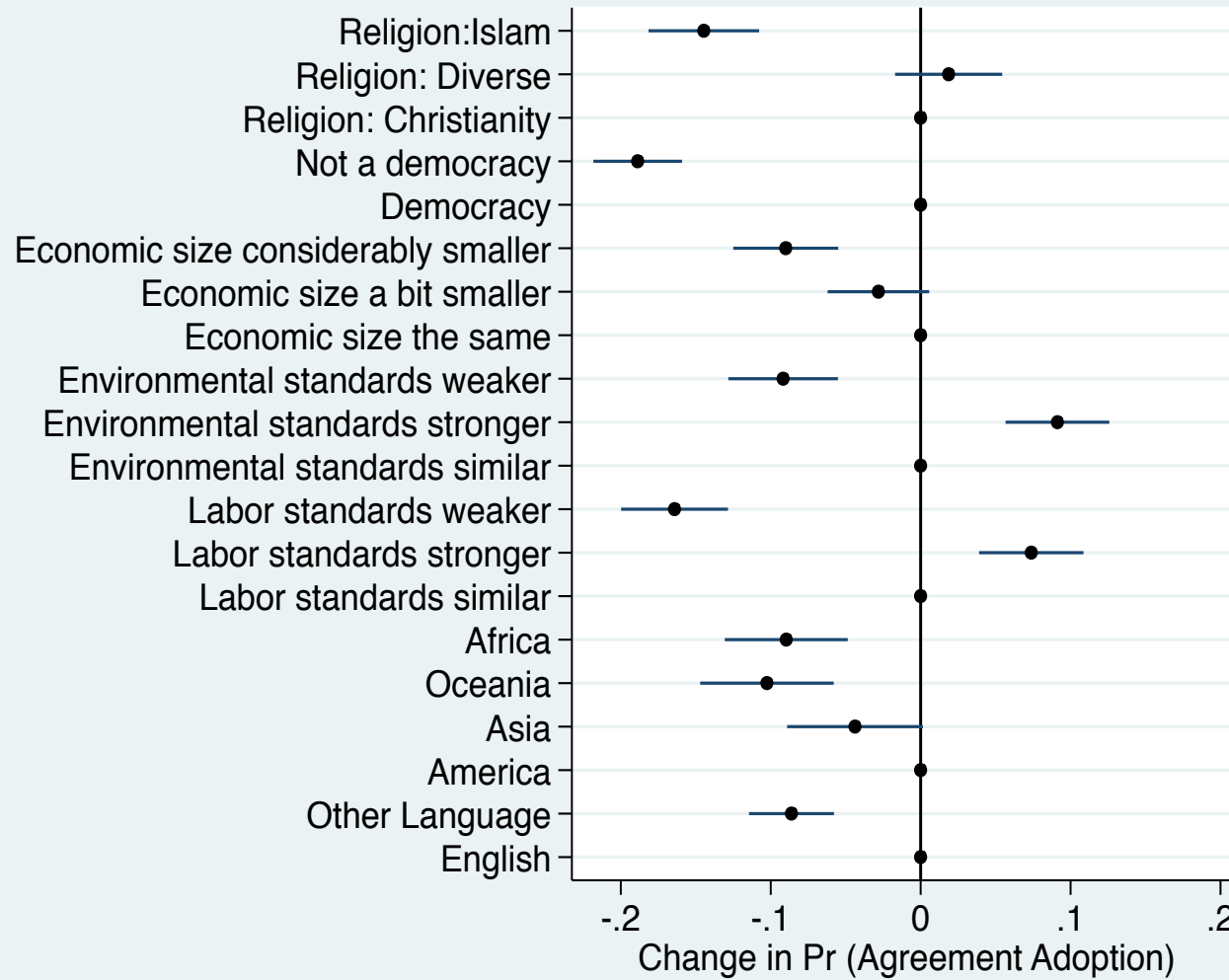
| Attribute                          | Value  |
|------------------------------------|--|
| Location                           | Africa, America, Asia, Oceania                 |
| Economic size compared to the U.S. | Same size, a bit smaller, considerably smaller |
| Religion                           | Christian, Islam, Diverse                      |
| Political system                   | Democracy, not a democracy                     |
| Worker rights                      | Weaker, stronger, similar                      |
| Environmental protection           | Weaker, stronger, similar                      |
| Language                           | English, other                                 |

## Advantages of conjoint analysis

- Several hypotheses can be tested simultaneously
- We can estimate the relative influence of each attribute value (country characteristic) on the resulting choice
- Enhanced realism of the choice task
- Reduces social desirability bias
- Provides insights into politically relevant issues of policy-design.



# Results



## In words ...

- As predicted by our theoretical argument, the likelihood of preferring a trading partner decreases when the country :
  - is in another continent
  - has a different main religion or language
  - is not a democracy
  - has weaker labor or environmental standards
  - it's economic size is considerably smaller

# Discussion

- Similarities of language, religion, location and post-material concerns increase the attractiveness of a trading partner.
- These results line up well with macro-level findings showing that geographic proximity, religion and language are important moderators of trade flows between country dyads.
- The results also connect to arguments about ethnocentricity, international animosity and out-group anxiety, which have been identified as robust predictors of individual trade policy preferences (Mansfield and Mutz 2009; Mayda and Rodrik 2005).

## Discussion (cont.)

- Preferences for higher environmental and labor standards in PTA partners line up with other findings in the trade policy literature showing that trade preferences are at least in part driven by sociotropic concerns (Mansfield and Mutz 2009).
- Our findings also relate to research in consumer and market psychology showing that consumers rely on heuristics from national images when making purchasing decisions. Such behavior may account in part for variation in support for bilateral trade (Klein, Ettenson, and Morris 1998).

## Discussion (cont.)

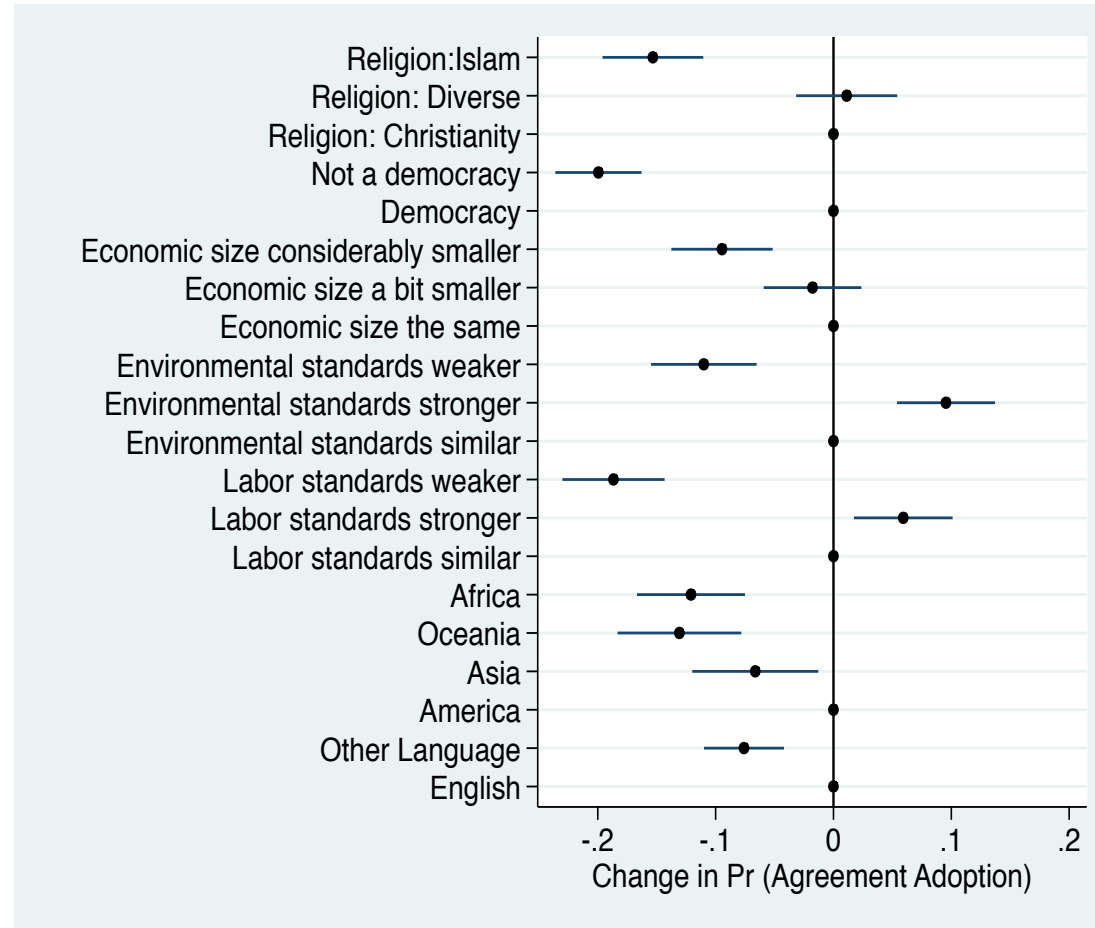
- Regarding economic size, our result lines up with the prediction of macro-level trade theory, which claim that the likelihood of a PTA decreases with size disparity (Baier and Bergstrand 2004).
- The implications for the individual level are explained by Grossman and Helpman (1995). A PTA will emerge when there is balance in potential trade between partner countries, as the average voter will support policies that are welfare enhancing.

## Further research and policy implications

- Revised version with a larger sample of U.S. respondents, including a larger battery of control items to split the sample (e.g. on political ideology, trade knowledge) and examine conditional treatment effects.
- Most of the low hanging fruits are already harvested, that is, PTAs among ‘natural trading partners’
- As new PTAs with dissimilar partners are formed, challenges for policy-makers dependent on public support are growing.

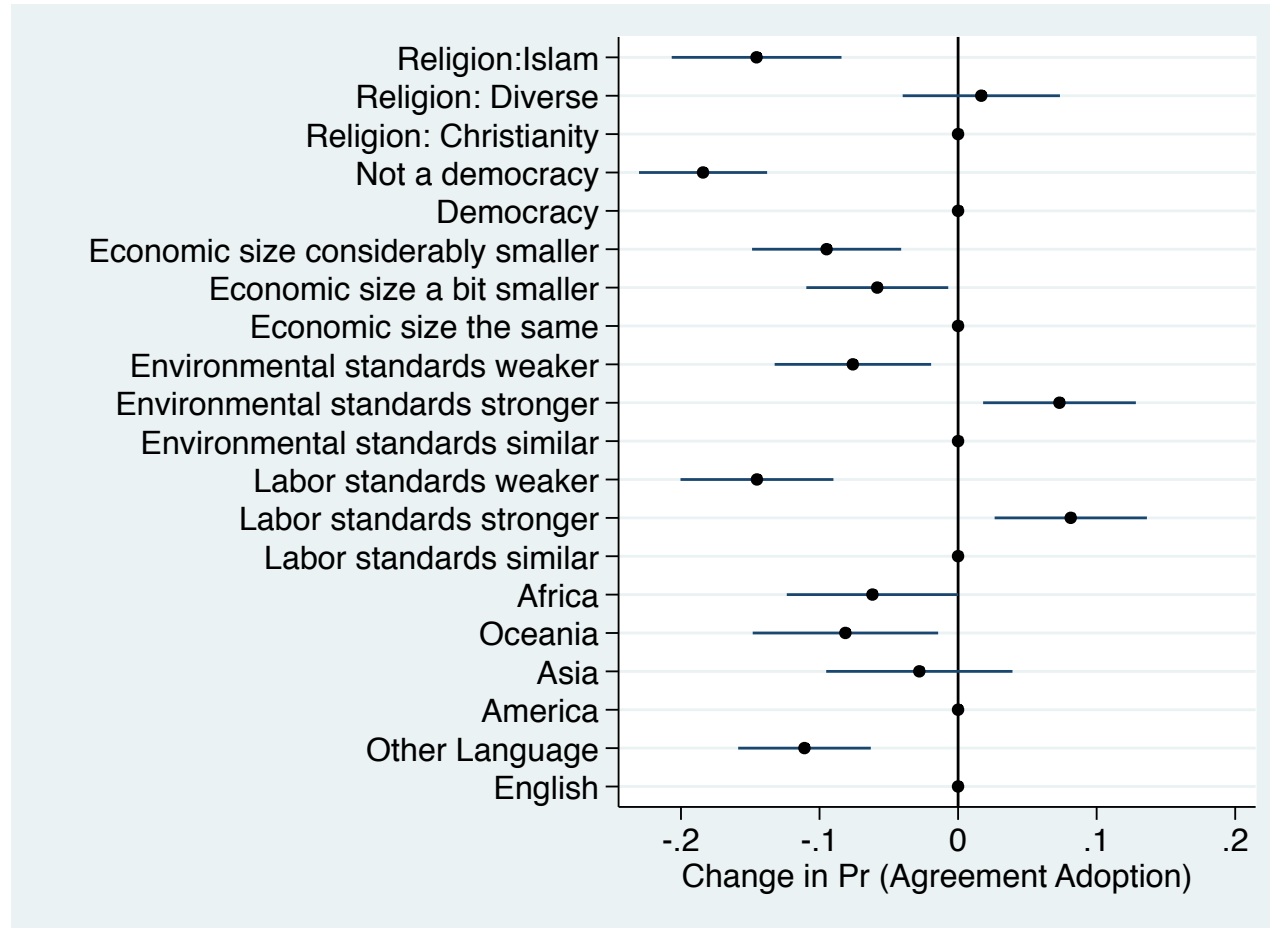
# ANNEXES

# Results: Marginal Effects (education high)

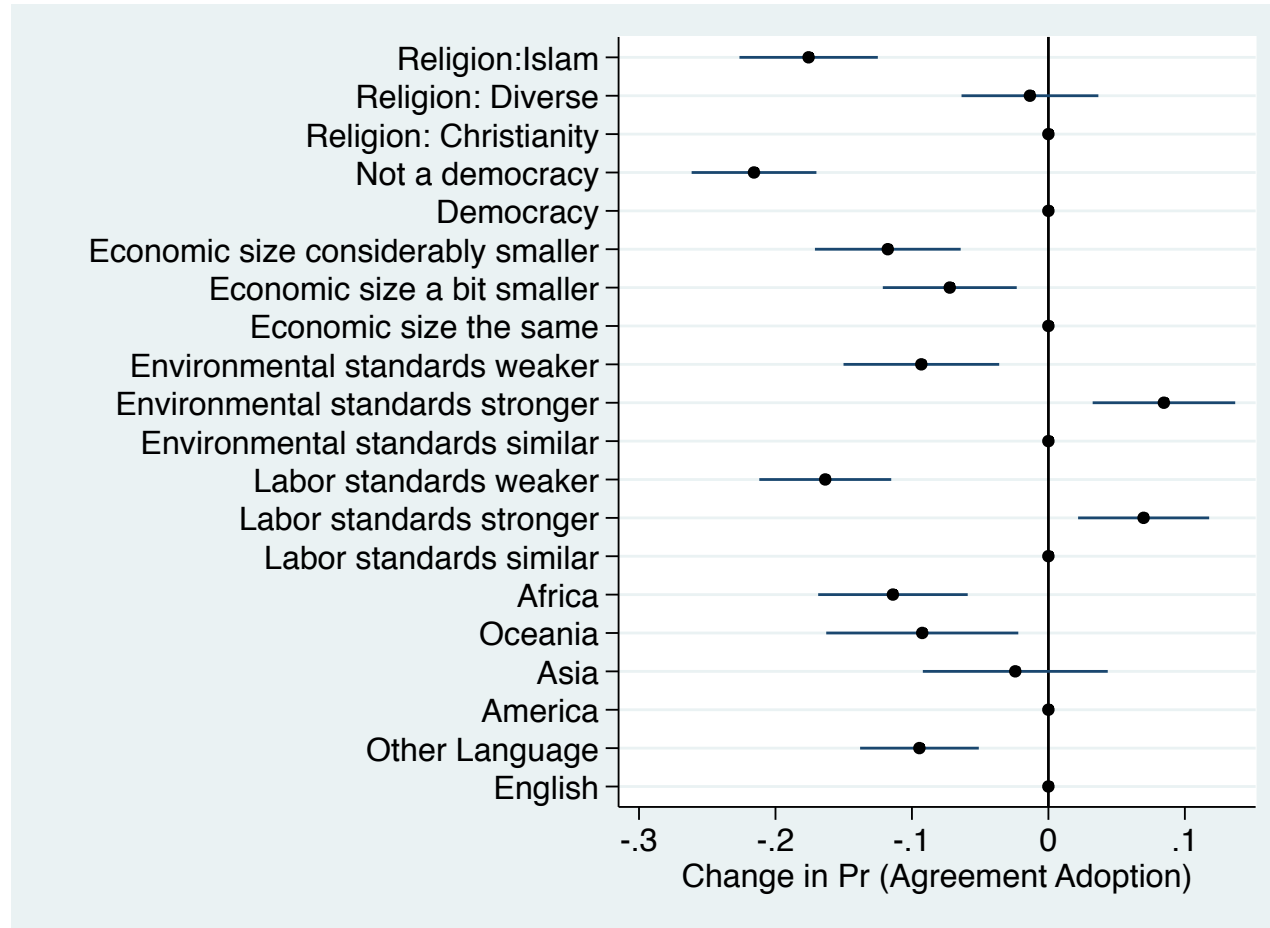




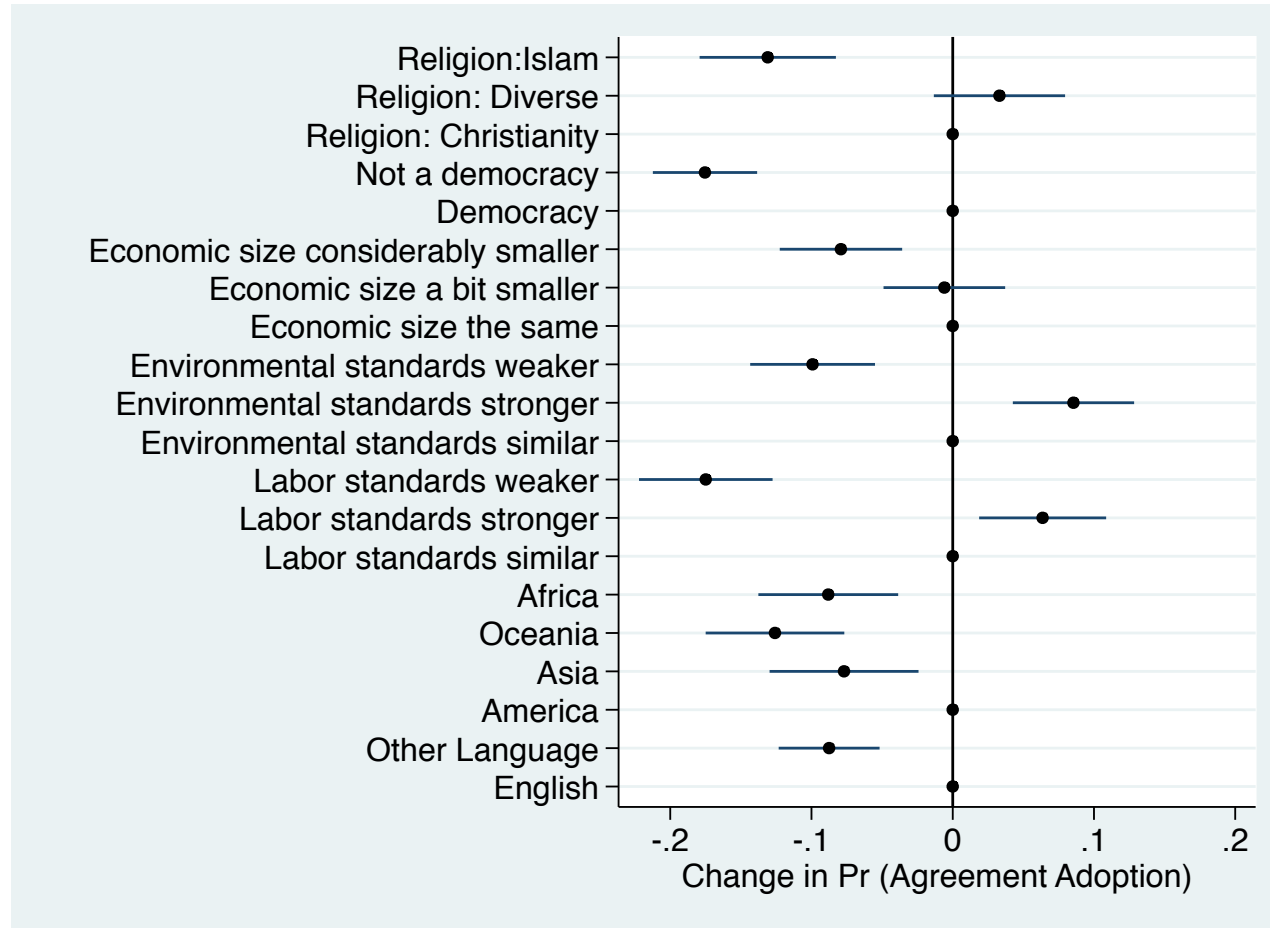
# Results: Marginal Effects (education low)



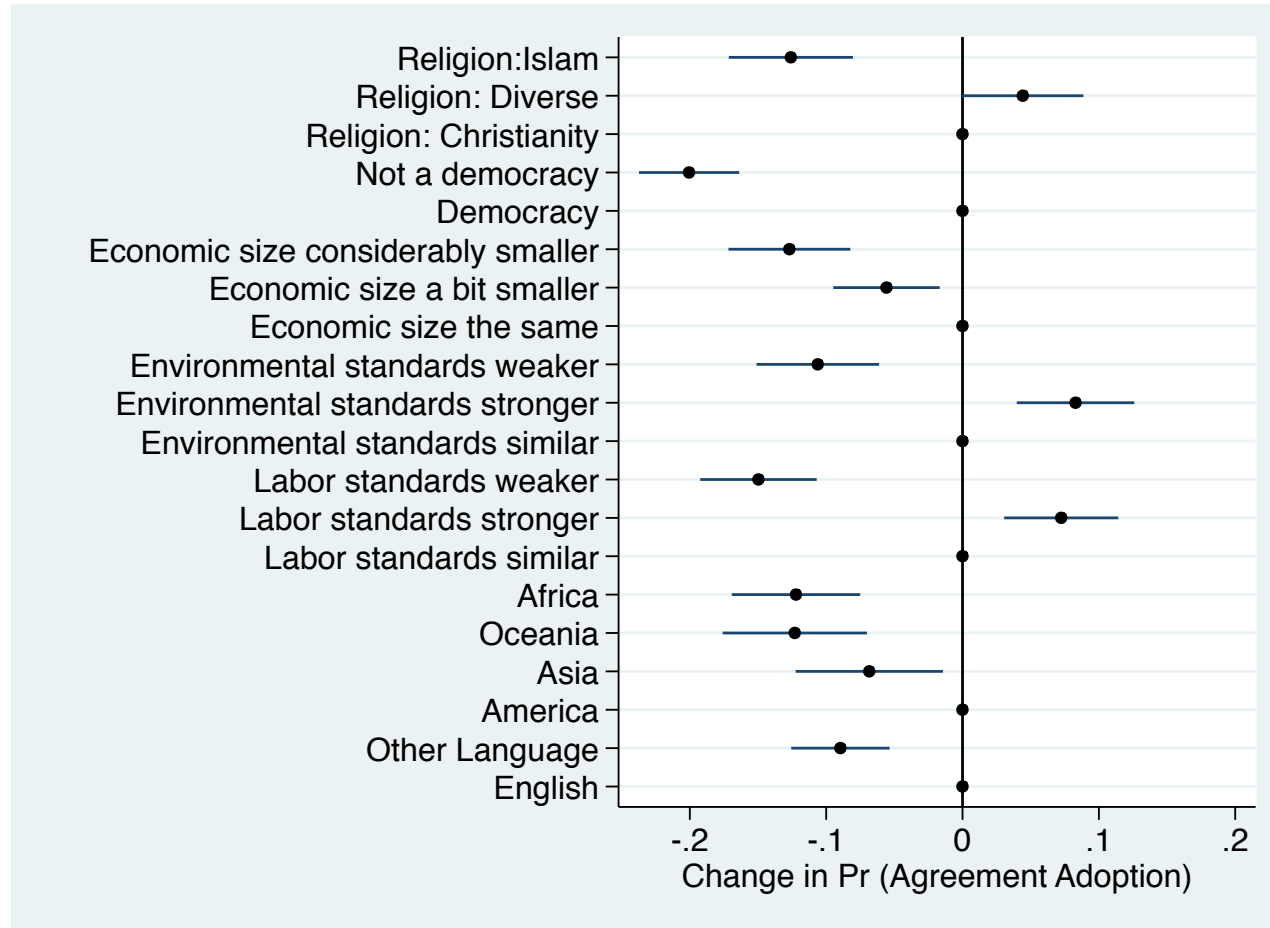
# Results: Marginal Effects (income high)



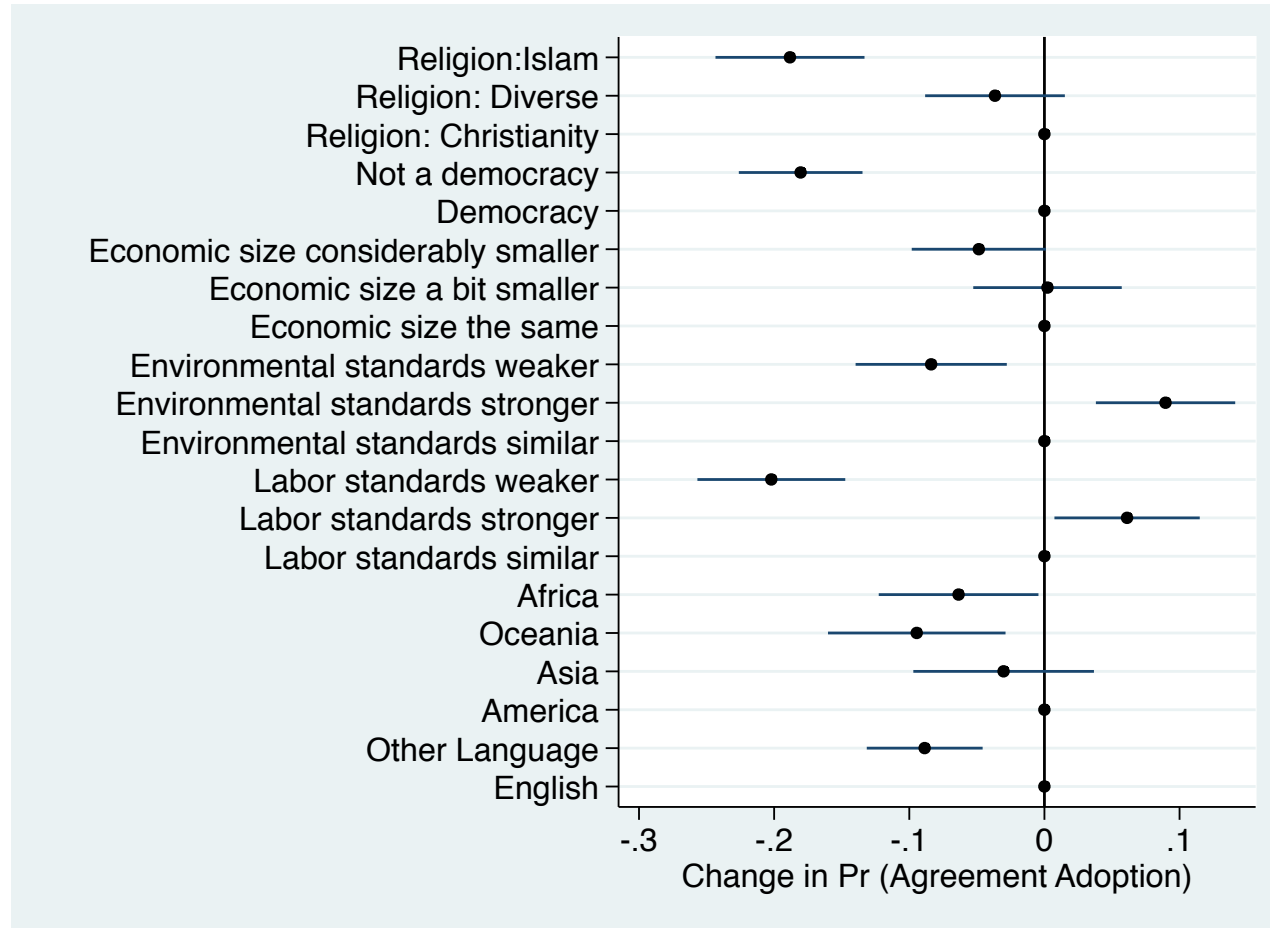
# Results: Marginal Effects (income low)



# Results: Marginal Effects (male)



# Results: Marginal Effects (female)



# Results: Regression

| Dimension                         | Attribute level                   | Trade Agreement     |
|-----------------------------------|-----------------------------------|---------------------|
| Geographic and economic proximity | Asia                              | -0.04*<br>(0.023)   |
|                                   | Oceania                           | -0.10***<br>(0.023) |
|                                   | Africa                            | -0.09***<br>(0.021) |
|                                   | Economic size bit smaller         | -0.03<br>(0.017)    |
|                                   | Economic size smaller             | -0.09***<br>(0.018) |
|                                   | Psychic distance                  | Other language      |
|                                   | Diverse religion                  | 0.02<br>(0.018)     |
|                                   | Islam                             | -0.14***<br>(0.019) |
| Political system                  | No democracies                    | -0.19***<br>(0.015) |
| Post-materialism                  | Labor rights stronger             | 0.07***<br>(0.018)  |
|                                   | Labor rights weaker               | -0.16***<br>(0.018) |
|                                   | Environmental regulation stronger | 0.09***<br>(0.018)  |
|                                   | Environmental regulation weaker   | -0.09***<br>(0.019) |
|                                   | Constant                          | 0.81***<br>(0.037)  |
|                                   | Observations                      | 4,944               |
|                                   | R-squared                         | 0.14                |

Robust standard errors in parentheses clustered by respondent

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

# Casual quantities of interest

- Average marginal component specific effect (AMCE)
  - how different values of each *attribute* will influence the probability that the profile is chosen.
  - e.g. What is the average marginal effect of each PTA provision. Whether the inclusion of environmental provisions will make an agreement more attractive
- Average component interaction effect (ACIE)
  - Whether the components interact with each other
  - e.g. whether the effect of democracy actually varies depending on the country's geographical location.
- ATE, AMCE and ACIE may all vary across respondent subpopulations, therefore we can estimate how those effects systematically change as functions of respondent characteristics

# Conjoint analysis: assumptions

- **Assumption 1 (No Carryover Effect):** the treatments given to a respondent in her other trials do not directly affect her response in the current trial. The choice for this task is independent of what they have seen before.
- **Assumption 2 (No Profile-Order Effect):** the ordering of the profiles within a trial does not affect responses in any manner
- **Assumption 3 (Randomization of the Profiles)**  
The attributes within each profile are randomly set (what appears in each cell)