# Institutional Constraints and Treaty Continuity

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#### Abstract

Conventional wisdom about international negotiations suggests that global agreements are individually negotiated and distinct, while recent studies find significant levels of similarity among treaties. I show that there is, in fact, notable variation in the extent to which countries recycle the language of past treaties. In particular, while some countries constantly adjust the provisions in their preferential trade agreements (PTAs), others conclude highly consistent PTAs with largely unaltered commitments. Understanding what causes treaty continuity is important since unchanging provisions might stall policy innovations and lead to institutional inefficiency. I argue that a country's institutional constraints strongly affect the degree of continuity in its trade agreements. Countries with higher levels of institutional constraints face a more stringent ratification constraint due to their large number of veto players with heterogeneous preferences. Anticipating this, trade negotiators try to secure ratification by reusing the provisions in existing agreements that are proven acceptable. Using a comprehensive dataset of all PTAs since 1945 and text analysis, I show that countries with higher levels of institutional constraint have concluded more similar treaties over time. Unpacking the relationship between domestic institutional constraints and treaty continuity contributes to a fuller understanding of institutional design and international cooperation.

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## 1 Introduction

Countries increasingly negotiate and sign preferential trade agreements (PTAs) that include a broad range of non-trade issues. Intellectual property, competition, labor rights, and environmental protection are increasingly regulated through PTAs (e.g. Lechner, 2016). The contents and enforceability of environmental provisions vary significantly. For example, the NAFTA Agreement on Environmental Cooperation (1994) stipulates the creation of an independent trilateral Commission for Environmental Cooperation to enhance enforcement by accepting and reviewing citizen submissions. The New Zealand-Taiwan (2013) and EU-Georgia (2014) PTAs, on the other hand, promote carbon trading and liberalizing trade for environmental goods and services without specifying an enforcement mechanism.

While countries by and large recycle the language of past treaties to some degree, there is great variation in the extent to which they do so. Some countries rely heavily on past treaties and/or existing templates. The environmental chapters in the U.S. PTAs between 2002 and 2006, for example, are strikingly consistent. Other countries seem to tailor the environmental provisions in their PTAs according to the conditions of their trading partners. For example, China has concluded some of the "greenest" PTAs in the developing world with Switzerland and Korea, respectively, according to an environmental indicator that measures how comprehensively different environmental issues are covered (Berger et al., 2020). Yet by the same measure China has also signed some of the least environmental PTAs with Israel and Australia.

The variation in treaty continuity does not only exist between democracies and nondemocracies, but within democracies and non-democracies as well. Using a text-based similarity measure that generates pair-wise similarity scores between treaties, Figure 1 shows that the environmental chapters in the PTAs concluded by Japan, for example, vary more greatly, with a relatively low average similarity score of 0.13, than those concluded by the U.S., with an average similarity score of 0.39.



Figure 1: Heat maps of pair-wise similarities of environmental chapters in U.S. and Japan PTAs

Gaining a fuller understanding of path dependence in PTAs is important. If governments are unable to update the specific provisions in their PTAs according to ever-shifting policy preferences and priorities and regulatory environment domestically and in partner countries, the resulting treaty continuity might lead to institutional inefficiency. An adequate understanding of the treaty continuity is lacking despite its implications on international trade and cooperation. This paper seeks to describe the landscape of environmental provisions in PTAs from the perspective of path dependence and propose an explanation for the varying degrees of treaty continuity. It argues that institutional constraints make it difficult for countries to instigate significant and frequent policy change. In contrast, countries with low institutional constraints might be more likely to tailor their environmental provisions according to changing incentives and the specific conditions of their trading partners.

This theory builds on a body of research on veto player and policy change that collectively argues that institutional veto players and preference heterogeneity among them limit the rate of policy change (Allee and Elsig, 2017; Henisz and Mansfield, 2006; Mansfield and Milner, 2012; Mansfield et al., 2008; Tsebelis et al., 2002). This paper also assumes that influential social interests with diametrically opposed preferences increase the costs of securing legislative approval. It departs, however, from this strand of research in proposing that high levels of institutional constraint do not necessarily stall the conclusion of new treaties. As the costs of securing ratification are greater as the number of veto players increases, countries with more veto players might indeed be less likely to enter trade agreements. However, the executive may also manage the transaction costs of securing legislative approval by relying on templates of existing agreements that are proven able to pass the ratification process. A larger number of veto players with heterogeneous preferences over environmental policies make it difficult for trade negotiators to fine-tune specific environmental provisions when negotiating a new PTA. It is ex-ante unclear, however, whether greater levels of institutional constraints would result in a lack of development of new provisions or policy innovations. Anticipating a high degree of pathdependence, trade negotiators in countries with greater levels of institutional constraints may exploit the precedent-setting power of its first PTAs, and ensure that they contain provisions that can serve as satisfying templates for future agreements. This paper additionally investigates the effects of institutional constraints both on treaty continuity and on policy innovation, and sheds light on how policymakers achieve the desired policies in countries with high levels of institutional constraints.

# 2 Explaining Treaty Design: Institutional Constraints versus Domestic Preferences

Among the theories using domestic politics to explain foreign economic policy outcomes, the two main alternatives focus on, respectively, the preferences of key constituents and domestic institutional constraints. Research shows that both the preferences of special interest (Chase, 2009; Manger, 2012; Milner, 1988, 1997) and domestic institutional constraints (Allee and Elsig, 2017; Mansfield and Milner, 2012; Mansfield et al., 2008) influence trade policymaking and the design of PTAs. This paper focuses on institutional constraints for the following reasons. First, institutional constraints provide a general approach to study the role of domestic politics on trade policy outcome in a cross-national setting. Countries with different regime types and trade negotiation processes universally face a formal or informal ratification constraint: trade negotiators will have to consider the position of the legislature or any veto player on the proposed agreement to ensure that it is domestically acceptable (Mansfield and Milner, 2012). In contrast, the relevant set of special interest groups and their preferences over trade policy are difficult to model in a cross-national setting. Second, existing research on institutional constraints has focused on how veto players stall policy change, yet policymakers in societies with high degrees of institutional constraints have alternative options to achieve their desired policy outcomes while managing the transaction costs of doing so. Specifically, trade negotiators may anticipate the path-dependence in trade policymaking, and thus negotiate every PTA in a forward-looking manner, taking into account future political priorities and/or the identities of future trade partners. This leads to the first hypothesis:

**Path Dependence Hypothesis:** Trade agreements concluded by countries with higher levels of domestic institutional constraints have a greater level of similarity with previous trade agreements concluded by the same country.

In practice, trade negotiators might not be able to always predict the relevant future circumstances accurately. When there is high uncertainty regarding the future, trade negotiators in countries with high levels of institutional constraints might not be able to design optimal precedents or adjust their agreements to adapt to new issues, circumstances, or preferences. This paper remains ex-ante agnostic about the effects of institutional constraints on trade policy innovation. This leads to two competing hypotheses:

**Inefficiency Hypothesis:** Trade agreements concluded by countries with higher levels of domestic institutional constraints contain fewer and less innovative provisions due to uncertainty about the future.

**Innovation Hypothesis:** Trade agreements concluded by countries with higher levels of domestic institutional constraints contain more and more innovative provisions as trade negotiators attempt to set optimal precedents.

# 3 Seeking Evidence: the Focus on Environmental Provisions in Trade Agreements

While I expect that the argument on institutional constraints and treaty continuity applies to domestic and foreign policymaking generally, this paper tests the theory using environmental provisions in trade agreements. Environmental issues are one of the most topical and contentious in the contemporary trade regime. Methodologically, this paper chooses to focus on environmental provisions in trade agreements to take advantage of the TREND database (Morin et al., 2018) that allows an in-depth comparison of environmental norms and innovations in a comprehensive set of trade agreements. More importantly, environmental provisions in trade agreements have substantive significance. The inclusion or absence of environmental issues and the specific provisions can matter critically for the successful conclusion and ratification of a trade agreement. In 1993, the Clinton administration negotiated an environmental side agreement in order to placate environmentalists and to pass the NAFTA Implementation Act in Congress (Lee, 2021). In September 2022, India opted out from the U.S.-led Indo-Pacific Economic Framework (IPEF) for the concern that the proposed environment commitments as binding conditionalities to the benefits of trade liberalization may be discriminatory. <sup>1</sup>

Environmental provisions in trade agreements have an independent impact on the course of multilateral trade liberalization (Bhagwati and Hudec, 1996). Some scholars argue that such linkages enhance the legitimacy of the multilateral trade regime (Richardson, 2000), while others are concerned with the potential use of labor and environmental provisions as regulatory barriers on trade and the possibility that global governance of environmental policies infringes upon national regulatory sovereignty (Bhagwati and Hudec, 1996; Krugman, 1997; Leary, 1996). Additionally, environmental provisions in trade agreements also influence a range of environmental outcomes. Scholars have found that countries that belong to trade agreements with environmental provisions have lower *CO*<sub>2</sub> emissions (Baghdadi et al., 2013) and instigate higher domestic environmental standards (Bastiaens and Postnikov, 2017), and that environmental provisions reduce the share of polluting exports and increase green exports from developing countries (Brandi et al., 2020).

Given the substantive importance of environmental provisions in trade agreements, scholars have investigated the domestic political and economic determinants of the variation in their design. They show that developed countries faced with higher levels of import competition and wage difference between them and developing PTA partners are more likely to include stringent environmental provisions (Blümer et al., 2020; Lechner, 2016; Morin et al., 2018), and that different electoral systems lead to either permissive or stringent provisions(Postnikov, 2019; Postnikov and Bastiaens, 2020).

These studies share two limitations that this paper addresses in the empirical analysis. First, these studies evade the issue of selection. Countries that enter PTAs with

<sup>&</sup>lt;sup>1</sup>See here for more reporting on India's decision to stay out of the Indo-Pacific trade pillar.

environmental provisions do not constitute a random sample. Countries with better environmental performance are more likely to sign PTAs with environmental provisions and even a separate chapter on the environment. Second, these studies generally assume that treaty texts directly reflect domestic preferences when the negotiation takes place, and do not consider legislative constraints faced by PTA negotiators to secure legislative approval and the dynamics of strategic bargaining between or among negotiating governments. The following example on labor rights during the negotiation of the United States - Colombia Trade Promotion Agreement (TPA) illustrates the constraints trade negotiators face. Despite the fact that U.S. and Colombian negotiators share concerns over violations of worker rights in Colombia, U.S. negotiators were constrained when Colombian negotiators suggested strengthening the labor chapter by adding the ILO core standard on nondiscrimination. Due to the enmity to ILO principles held by some mebers of the Congress, U.S. negotiators concluded that adding this standard to the labor chapter would result in a net loss of votes from labor standards opponents in the Congress (Elliott, 2011).

## 4 Path Dependence: Existing Explanations

Most existing research does not consider institutional constraints faced by trade negotiators and the resulting treaty continuity. A few exceptions recognize the phenomenon of treaty similarity (Allee and Elsig, 2019; Castle, 2022; Claussen, 2018; Lechner, 2016; Peacock et al., 2019). These studies highlight that certain chapters of US trade agreements are virtually unchanged for more than a decade, and that more than one hundred PTAs worldwide take 80 percent or more of their contents directly from a single, existing treaty (Allee and Elsig, 2019; Claussen, 2018). Scholars attribute the phenomenon to four main reasons: First, reusing previous agreements reduces transaction costs and achieves efficiency gains, either by directly reducing the bureaucratic costs of drafting and legal scrubbing and the uncertainty involved in legal interpretation (Lechner, 2016; Peacock et al., 2019), or by avoiding having to resecure the approval of domestic veto players (Mansfield and Milner, 2012). Second, leaning on previous agreements could be a result of power relations. Allee and Elsig (2019) find that copying and pasting is most prevalent among low-capacity governments that lean heavily on existing templates, and powerful states that desire to spread their preferred rules globally. Third, Lechner (2016) argues that policy-makers tend to stick to the language in previously signed treaties to avoid backing down from previous commitments and incurring an audience cost. However, such reputational concerns do not explain why it seems as difficult to raise standards as to lower them (Lechner, 2016). Finally, some scholars attribute treaty draftersâ tendency to adhere to previous agreements to the chief negotiators' personal attachment to the language in past agreements (Elsig and Karolina, 2017). To my knowledge, no study has directly tested the relationship between the continuity in treaty design and domestic institutional constraints.

### 5 Empirical strategy

My central hypothesis is that a greater number of veto players in a country is associated with greater levels of continuity in its environmental provisions. As a countryâs number of veto players increases, the government is increasingly less likely to tailor the environmental provisions in its PTAs to the conditions of different trading partners, and the continuity and rigidity of the environmental provisions across its PTAs increases. To test the theory, I estimate an OLS model using two conceptually different measures of treaty continuity and various measures of institutional constraint. Since countries do not select into including a separate chapter on the environment randomly, I further estimate a 2-stage Heckman model to obtain unbiased estimates that account for the unobserved selection process.

#### 5.1 Data and Sample

To obtain the full sample of PTAs and text data, I rely on the comprehensive Design of Trade Agreements (DESTA) Database supplemented by the machine-readable and structured full text corpus, the Text of Trade Agreements (ToTA). These datasets together contain 448 WTO-notified trade agreements between 1948 and 2016 (Alschner et al., 2018; Dür et al., 2014). To compare treaties in a common language, I omit the PTAs that are neither concluded nor available in English.<sup>2</sup> The unit of analysis is country-PTA, resulting in 2646 observations. A total of 61 PTAs contain a separate chapter on the environment that generate 444 country-PTA units.

#### 5.2 Conceptualizing Continuity

The dependent variable, continuity<sub>it</sub>, is a measure of the extent to which the environmental chapter of a PTA resembles a previous treaty concluded by the same country. I conceptualize treaty continuity in two different but related ways that aim to delineate the full extent to which treaties vary, textually and substantively. First, I adopt a text-based measure of *textual* similarity by comparing the use of identical or verbatim texts across treaties. Textual similarity based on automated text comparison provides a useful measure of treaty continuity. It is particularly suited for analyzing legal and transactional documents, where text and normative content are typically closely intertwined. Unlike documents written in natural language that reflect individual language style (such as judicial decisions), legal documents like PTAs are written in standardized legal language that does not normally vary for stylistic reasons alone. The correspondence between normative content and text in PTAs ensures that automated, semantically agnostic textual

<sup>&</sup>lt;sup>2</sup>The overwhelming majority of treaties are either concluded or available in English. The 25 omitted treaties constitute 3.8% of the full sample of country-PTA units.

similarity analysis provides accurate insight into treaty continuity over time (Alschner, 2020). On the other hand, since boilerplate language is widely adopted in PTAs, textbased measures may overestimate the similarity between treaties by largely capturing the repeated use of standard legal language, while overlooking minor textual discrepancies that may result in substantive differences.

To address this issue, I adopt a second, content-based measure of *substantive* similarity by comparing the specific environmental provisions across treaties. To date PTAs include a wide variety of environmental provisions - from general principles related to environmental protection to enforceable obligations; from clauses that preserve countriesâ regulatory sovereignty to exemptions and flexibilities granted to developing countries; from provisions specifying the relationship between the environment and trade to the interaction between the environment and investment, energy, and social issues. While the semantic differences among these provisions can be subtle and not easily detectable by automated text analysis, their differences are substantively important and can meaningfully affect the negotiation outcome of a PTA and its effects on trade, investment, and the environment after its conclusion. Substantive similarity thus complements textual similarity to depict a second dimension of variation in treaty design.

#### 5.3 Operatioanlization of Textual and Substantive Continuity

(1) *Textual similarity*. For each PTA that includes an environmental chapter, I first preprocess the text of the environmental chapter by converting all words to lowercase, removing non-alphanumeric characters, and collapsing multiple spaces. This process rids treaty texts of certain noise that interferes with the subsequent similarity analysis and alleviates the potential overestimation of similarity due to boilerplate language. I then calculate, for each country, pairwise text similarity scores using the inverse of Jaccard distance between 5-gram tokenization of the preprocessed treaty texts. 5-gram tokenization, which breaks

texts into consecutive set of 5 words, ensures that the subsequent comparison captures the use of identical words that are in the same order. This allows the measure to move beyond traditional word frequency analysis and to capture verbatim language (Alschner, 2020). Finally, for each country-PTA, I define its textual continuity<sub>it</sub> as the smallest Jaccard distance (hence the greatest Jaccard similarity) of its environmental chapter from a previous one concluded by the same country. This measure varies from 0 to 1 with 0 implying no overlap between two given texts and 1, full overlap, based on the 5-gram text representation (Alschner and Skougarevskiy, 2016; Spirling, 2012). To illustrate, the United States-Colombia Trade Promotion Agreement has a similarity score of 0.91, since its environmental chapter has a 91% overlap with the environmental chapter in the United States-Peru Free Trade Agreement (PTPA), concluded shortly before.

(2) Substantive similarity. To capture the substantive differences in environmental provisions, I utilize the TRade & ENvironment Database (TREND), the most comprehensive dataset on environmental provisions in PTAs "in terms of both variables coded and agreements covered" (Morin et al., 2018). For each PTA, the authors manually coded the existence or absence of 14 broad environmental areas and a total of 308 different specific environmental provisions, treating PTAs as vectors in a multidimensional policy space. For each country, I calculate the Euclidian distances between pairs of (vectorized) PTAs, and define the *substantive* similarity of a PTA as the smallest Euclidian distance from another PTA concluded by the same country. This value is normalized to 0 and 1 to ensure comparability with the measure of textual similarity. Unsurprisingly, the two measures of treaty similarity are positively (albeit weakly) correlated with a correlation coefficient of 0.25.

To adjudicate between the innovation and inefficienty hypothese, I test the effects of instutitional constraints on the total number of environmental provisions. As explained above, the TREND dataset codes the existence or absence of 14 broad environmental ar-

eas and a total of 308 different specific environmental provisions. This measure counts the total number of environmental provisions in a PTA and captures innovation by identifying when a specific norm appears in a PTA.

#### 5.4 Indepedent variables and operatioanlization

The key independent variable  $veto_{it}$  captures institutional and legislative constraint on policy change (Henisz, 2002). It is estimated by first identifying the number of independent branches of government (executive, lower and upper legislative chambers) with veto power over policy change, and then incorporating the extent of alignment across branches of government. Such alignment increases the possibility of policy change. I use data from the most updated veto player dataset (updated in 2015) based on Henisz (2002).

This measure is supplemented by three other indicators of institutional constraint. First, the polconv variable of the veto player dataset similarly measures political constraint but includes judiciary and sub-federal entities as veto points. Second, xconst component of the Polity IV dataset captures the degree of political competition with and opposition to the chief executive. Third, the leg\_con from the V-Dem project captures the legislative constraint on the executive. Coders are asked "To what extent is the legislature and government agencies (e.g., comptroller general, general prosecutor, or ombudsman) capable of questioning, investigating, and exercising oversight over the executive?" Figure 2 shows that the alternative measures of institutional constraint are highly correlated.

A limitation of these measures of institutional veto power is that they encompass the general ease with which the executive branch is capable of enacting policy change, from domestic policy to foreign security issues, and none is specific to trade policy or environmental regulations. Constructing a valid measure of legislative constraint on trade policy requires an understanding of the relevant actors and interests related to environmental provisions in PTAs and the channels through which they express their preference and



Figure 2: Correlation matrix of alternative measures of institutional constraint wield influence.

I include a list of control variables that can influence variation in treaty continuity. Most importantly, since powerful countries might be able to dictate the terms of the agreement and/or have an interest in spreading their preferred regulations globally, I include log(GDP) to reflect this dynamic. I further include the number of existing PTAs a country has concluded to approximate the country's bureaucratic capacity (since a lack of bureaucratic capacity may lead to over-reliance on existing templates), a country's environmental performance (based on Yale Universityâs Environmental Performance Index EPI), whether a PTA is regional or cross-regional (presumably regional and cross-regional PTAs have different bargaining dynamics and may cast different impact on the environment, see Abman and Lundberg (2020); Rodrik (2018)). Table 1 provides a summary of key variables.

Statistic	Ν	Mean	St. Dev.	Min	Max
Textual similarity	526	0.1	0.1	0.0	0.9
Substantive similarity	840	0.1	0.2	0.0	1.0
Year	2,947	1,997	14.5	1,948	2,016
ln(GDP)	2,804	25.0	2.4	16.4	30.6
polconiii	2,734	0.4	0.2	0.0	0.7
polconv	2,680	0.6	0.3	0.0	0.9
xconst	2,616	6.1	1.8	1	7
v2xlg_legcon	2,785	0.8	0.3	0.02	1.0
polity	2,616	6.8	5.8	-10	10
EPI	2,848	62.9	16.5	22.6	82.5
No. of PTAs	2,947	39.4	28.7	1	84
No. of provisions	772	89.7	29.1	17	133

Table 1: Summary Statistics

## 6 Results

I find that different measures of domestic institutional constraint have positive and significant effects on treaty continuity, and effects are robust to the inclusion of controls of GDP, the number of PTAs signed, and various PTA-level characteristics (Tables 2 and 3). The results also lend support to the innovation hypothesis: countries with greater institutional constraints are more likely to conclude PTAs with more innovative environmental provisions (Table 4). Taken together, the results suggest that trade negotiators in countries with greater levels of institutional constraints are able to achieve desired policies while managing the transaction costs of securing legislative approval by negotiating earlier PTAs in a forward-looking manner and setting favorable precedents.

#### 6.1 Non-random sample of PTAs with an environmental chapter

Since only a proportion of PTAs (61 out of 448 PTAs and 18% of country-PTA observations) include a separate chapter on the environment, and the process by which countries select into dedicating a chapter to environment issues in the main treaty is not random, I test whether the effects of institutional constraint on treaty continuity is robust to models that account for the selection process. Since democracies and countries that care about

	Dependent variable: Textual Continuity of Environmental Provisions				
	(1)	(2)	(3)	(4)	
Veto points (iii)	0.057				
-	(0.048)				
Veto points (v)		0.096**			
<b>1</b>		(0.036)			
Legislative constraint (V-Dem)			$0.084^{*}$		
0			(0.039)		
Constraint on the executive (polity)			. ,	0.016*	
а 3,				(0.008)	
ln(GDP)	0.020***	0.016***	0.017***	0.017***	
· · · ·	(0.004)	(0.004)	(0.004)	(0.004)	
No. of PTAs signed	-0.001*	-0.001*	-0.001*	-0.001*	
0	(0.0004)	(0.0004)	(0.0004)	(0.0004)	
Cross-regional PTA	0.013	0.006	0.016	0.007	
0	(0.022)	(0.023)	(0.022)	(0.023)	
Constant	-0.402***	-0.333**	-0.361***	-0.398***	
	(0.102)	(0.104)	(0.099)	(0.103)	
Observations	494	493	509	487	
R <sup>2</sup>	0.287	0.295	0.288	0.290	
Adjusted R <sup>2</sup>	0.277	0.285	0.278	0.280	
	-	*		1. *** <0.001	

#### Table 2: Institutional Constraints and Textual Continuity

#### Note:

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001

the environment are more likely to include environmental provisions in trade agreements (Morin et al., 2018), I include polity and EPI as proxies for democracy and environmental performance in the first-stage estimation to model the probability that a PTA has an environment chapter. Table 5 and Table 6 show that the positive effects of institutional constraint on treaty continuity are consistent when the process by which countries select into including an environmental chapter in their PTAs is accounted for, and the results are significant for content-based, substantive continuity. These results lend support that unbiased estimations indicate higher levels of institutional constraint may result in greater treaty continuity.

	Dependent variable:				
	Substantive Continuity of Environmental Provision				
	(1)	(2)	(3)	(4)	
Veto points (iii)	0.206*** (0.062)				
Veto points (v)		0.148** (0.047)			
Legislative constraint (V-Dem)			0.149** (0.054)		
Constraint on the executive (polity)			· · /	0.044*** (0.010)	
ln(GDP)	-0.006 (0.005)	-0.012* (0.005)	-0.010 (0.005)	-0.013* (0.005)	
No. of PTAs signed	-0.001** (0.0005)	-0.001** (0.0004)	-0.001* (0.0004)	-0.001* (0.0004)	
Cross-regional PTA	-0.284*** (0.022)	-0.286*** (0.022)	-0.284*** (0.021)	-0.292*** (0.022)	
Constant	0.457** (0.141)	0.585*** (0.138)	0.511*** (0.135)	0.443** (0.147)	
Observations	785	782	810	762	
R <sup>2</sup>	0.221	0.226	0.220	0.235	
Adjusted R <sup>2</sup>	0.214	0.219	0.213	0.228	

### Table 3: Institutional Constraints and Substantive Continuity

# Note:

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001

# 6.2 Role of the United States

To forestall concern that the results are driven by the peculiarity of the United States, where trade negotiation has been particularly contentious and has become high politicized in recent years, I replicate the estimations without the United States. The results remain unchanged (Tables 7 and 8). countries with greater levels of institutional constraints have concluded more similar treaties over time.

	<i>Dependent variable:</i> Total Number of Environmental Norms				
	(1)	(2)	(3)	(4)	
Veto points (iii)	12.947*				
	(5.795)				
Veto points (v)		4.243			
-		(4.421)			
Legislative constraint (V-Dem)			13.396**		
			(5.113)		
Constraint on the executive (polity)				3.725***	
				(0.895)	
ln(GDP)	-0.304	-0.457	-0.630	-1.367**	
	(0.486)	(0.502)	(0.487)	(0.499)	
No. of PTAs signed	0.059	0.070	0.063	0.089*	
	(0.043)	(0.041)	(0.042)	(0.040)	
	(2.001)	(1.996)	(1.969)	(1.971)	
Constant	41.877**	48.129***	43.878***	52.407***	
	(13.131)	(12.891)	(12.517)	(13.257)	
Observations	720	717	743	698	
R <sup>2</sup>	0.544	0.542	0.542	0.563	
Adjusted R <sup>2</sup>	0.540	0.538	0.538	0.559	
Note:	*p<0.05; **p<0.01; ***p<0.001				

# Table 4: Institutional Constraints and Innovation

	Dependent variable: Textual Continuity of Environmental Provisions			
	(1)	(2)	(3)	(4)
Veto points (iii)	0.089 (0.053)			
Veto points (v)		0.127** (0.042)		
Legislative constraint (V-Dem)		· · ·	0.122* (0.050)	
Constraint on the executive (polity)				0.027 (Inf.000)
ln(GDP)	0.022*** (0.003)	0.018*** (0.004)	0.020*** (0.004)	0.001 (Inf.000)
No. of PTAs signed	-0.001* (0.0003)	-0.001** (0.0003)	-0.001** (0.0003)	-0.0002 (Inf.000)
Constant	-0.418*** (0.102)	-0.374*** (0.108)	-0.433*** (0.105)	-0.417 (Inf.000)
Observations	2,598	2,597	2,598	2,600
Note:	*p<0.05; **p<0.01; ***p<0.001			

# Table 5: Heckman Selection Model - Second Stage Estimation

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	Dependent variable:					
	Substantive Continuity of Environmental Provisions					
	(1)	(2)	(3)	(4)		
Veto points (iii)	0.094 (0.071)					
Veto points (v)		0.060 (0.054)				
Legislative constraint (V-Dem)			0.132* (0.065)			
Constraint on the executive (polity)			· · · ·	0.014 (0.011)		
ln(GDP)	-0.025*** (0.006)	-0.027*** (0.007)	-0.025*** (0.007)	-0.024*** (0.007)		
No. of PTAs signed	-0.001 (0.0004)	-0.001 (0.0004)	-0.001 (0.0004)	-0.0005 (0.0004)		
Constant	0.818*** (0.193)	0.874*** (0.189)	0.742*** (0.200)	0.714*** (0.213)		
Observations	2,525	2,523	2,527	2,529		
Note:		3	*p<0.05; **p<	0.01; ***p<0.001		

# Table 6: Heckman Selection Model - Second Stage Estimation

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	Dependent variable:				
	Textual Continuity of Environmental Provisions				
	(1)	(2)	(3)	(4)	
Veto points (iii)	0.056				
	(0.040)				
Veto points (v)		0.065*			
		(0.030)			
Legislative constraint (V-Dem)			0.056		
			(0.033)		
Constraint on the executive (polity)				0.013*	
				(0.006)	
ln(GDP)	0.005	0.003	0.003	0.003	
	(0.004)	(0.004)	(0.004)	(0.004)	
No. of PTAs signed	-0.0002	-0.0002	-0.0002	-0.00004	
	(0.0003)	(0.0003)	(0.0003)	(0.0003)	
Cross-regional PTA	-0.001	-0.005	0.001	-0.006	
	(0.019)	(0.019)	(0.019)	(0.020)	
Constant	-0.075	-0.036	-0.045	-0.061	
	(0.097)	(0.097)	(0.094)	(0.099)	
Observations	468	467	483	461	
R <sup>2</sup>	0.325	0.328	0.325	0.329	
Adjusted R <sup>2</sup>	0.315	0.318	0.315	0.319	
Note:	*p<0.05; **p<0.01; ***p<0.001				

Table 7: Institutional Constraints and Textual Similarity - Role of the United States

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	Dependent variable:				
	Substantive Continuity of Environmental Provisions				
	(1)	(2)	(3)	(4)	
Veto points (iii)	0.209**				
	(0.064)				
Veto points (v)		0.155**			
		(0.049)			
Legislative constraint (V-Dem)			0.153**		
			(0.055)		
Constraint on the executive (polity)				$0.045^{***}$	
				(0.010)	
ln(GDP)	-0.005	-0.010	-0.008	-0.011	
	(0.006)	(0.006)	(0.006)	(0.006)	
No. of PTAs signed	-0.001**	-0.001**	-0.001*	-0.001*	
	(0.0005)	(0.0005)	(0.0005)	(0.0005)	
Cross-regional PTA	-0.282***	-0.284***	-0.283***	-0.289***	
	(0.022)	(0.022)	(0.022)	(0.023)	
Constant	$0.424^{**}$	0.535***	0.476**	0.383*	
	(0.160)	(0.156)	(0.153)	(0.170)	
Observations	759	756	784	736	
R <sup>2</sup>	0.216	0.221	0.215	0.231	
Adjusted R <sup>2</sup>	0.209	0.214	0.208	0.223	
Note:	*p<0.05; **p<0.01; ***p<0.001				

# Table 8: Institutional Constraints and Substantive Similarity - Role of the United States

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### 7 Conclusion

In this paper, I argue that domestic institutional constraints lead to continuity in the environmental provisions in PTAs and show that countries with more veto players have concluded more similar treaties over time. Though the degree of continuity or flexibility in a countryâs environmental provisions in its PTAs (and the role of institutional constraints) is but one of the many aspects that are relevant to gaining a fuller understanding of international negotiation and regulation, understanding cross-national variation in continuity and flexibility has theoretical and substantive importance.

Highlighting the influence of domestic veto players on treaty continuity helps clarify the relationship between two alternative approaches of explaining trade policy outcomes: special interests versus institutional constraints. It is well established that both special interests (such as industry demands, see Chase, 2009; Manger, 2012; Milner, 1988, 1997) and domestic institutional constraints (Allee and Elsig, 2017; Mansfield and Milner, 2012; Mansfield et al., 2008) influence trade policymaking and the design of PTAs, but existing research does not explain how the two factors interact and jointly shape policy outcomes. This paper attempts to bridge the 1) interest group influence/social preference approach and the 2) institutional constraint theory in explaining trade policy outcomes: while interest group politics and social preferences explain horizontal, cross-national variations in PTAs, institutional constraints explain vertical, within-country continuity or flexibility in PTA provisions.

As much as negotiators are subject to the legislative constraint and manage the transaction costs of securing ratification by resorting to more consistent treaties, they may also exploit the strategic opportunities provided by such continuity to obtain favorable negotiation outcomes. Prior agreements may amount to "hands-tying" and thus support negotiatorsâ interests by communicating a negotiatorâs domestic institutional constraints (Castle, 2022; Schelling, 1980). On the other hand, if governments "hold onâ to past treaty language for too long due to high levels of legislative constraints, they may fail to adjust their agreements and adapt to new issues, circumstances, or preferences. Uncertainty about the future PTA partners (possibly due to government turnover, change in multilateral trade infrastructure, and so on) conditions the choice. Studying how legislative constraints affect the continuity of a countryâs labor and environmental provisions in its PTAs will inform understanding of countriesâ strategic negotiation behavior, and will allow scholars to better understand the variation in and forces behind trade policy outcomes.

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