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Weak vs. Strong Ties: Explaining Early Settlement in WTO Disputes

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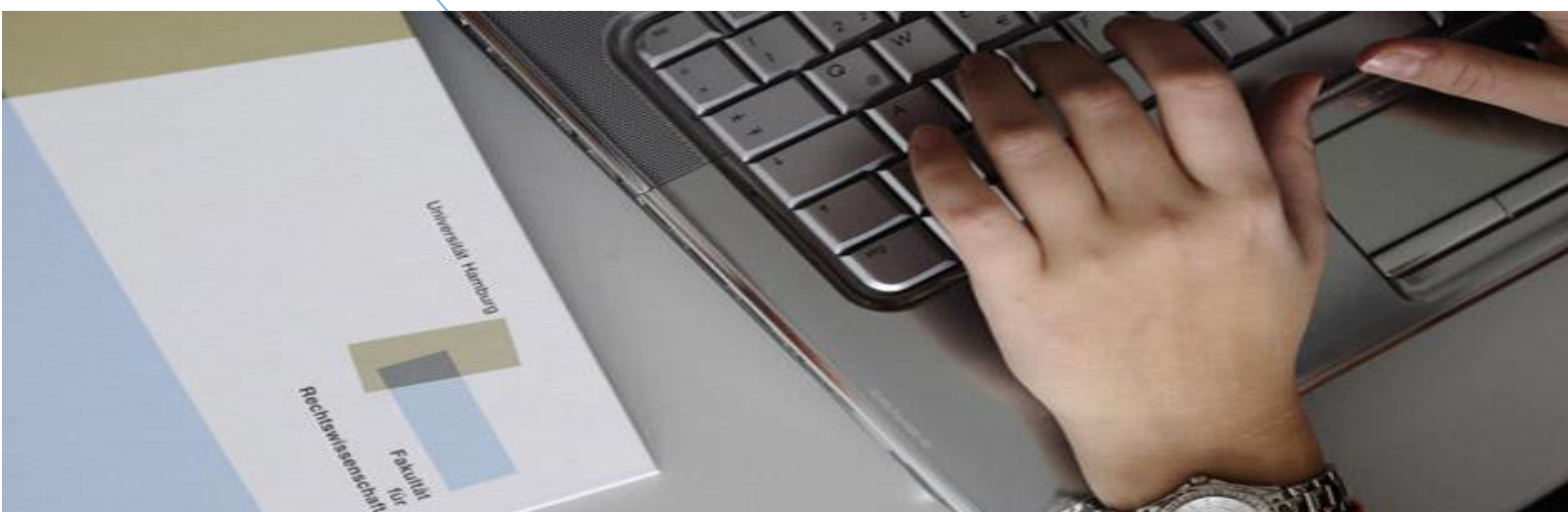
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Jiwon Lee
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Weak vs. Strong Ties: Explaining Early Settlement in WTO Disputes

(working title)

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Abstract

Empirical investigations of litigation at the WTO reveal a noteworthy pattern: the majority of disputes settle early, either during consultation, or prior to the issuance of a panel ruling. This is surprising, considering the structure of its remedial regime undermines the system's deterrent effect. It is, therefore, theorized that formal adjudication gains enforcement power by disseminating information on state conduct, unleashing reputational pressures. Building on the emerging stream of literature interested in the interaction between overlapping institutions, we contend that the degree to which defendants' are embedded in external trade agreements acts as an important determinant of dispute escalation at the WTO. The fear of reputational sanctions emanating from an adverse ruling exerts impetus for settlement in disputes involving defendants that are signatories of a few, shallow agreements. The "shadow of the future," in the form of ongoing trade negotiations, heightens the sensitivity to reputation for states with a strong potential to increase market access in the future. To test our hypothesis we quantified evidence on settlement patterns for the organization's first fifteen years of operation. We have also compiled a novel dataset consisting of 233 trade agreements disputants were signatories to during our observation period. To account for diverse levels of integration, a measure of depth is included, applying the additive depth index introduced by the DESTA project. In order account for the fact that some provisions may be more relevant drivers of the depth of an agreement, we conducted a factor analysis to unravel unobserved, latent variable(s). We find strong support for the claim defendants' wider integration in the trade realm predicts settlement dynamics within the WTO dispute settlement system. Our results remain statistically significant despite alternative specifications and robustness tests.

Table of Contents

ABBREVIATIONS.....	4
I. INTRODUCTION.....	5
II. BACKGROUND.....	10
1. WTO DSM: CHANGES FROM THE GATT	10
1.1 <i>WTO DSM: Main Objectives</i>	10
1.2 <i>WTO DSM: Main Weaknesses</i>	11
2. EARLY SETTLEMENT AND CONCESSIONS IN ABSENCE OF COERCIVE ENFORCEMENT	13
3. REPUTATION AND DISPUTE RESOLUTION INSTITUTIONS	14
4. PUZZLE AND HYPOTHESES.....	16
III. RESEARCH DESIGN	18
1. UNIT OF OBSERVATION	18
2. DEPENDENT VARIABLE.....	19
2.1 <i>Dispute Escalation</i>	20
2.2 <i>Concessions by the Defendant</i>	20
3. INDEPENDENT VARIABLES.....	23
3.1 <i>Trade Agreement Data Compilation Method</i>	23
3.2 <i>Conceptualization and Measurement of Depth</i>	25
4. DATA AND MEASUREMENT CHALLENGES.....	27
4.1 <i>Treatment of the EU</i>	27
4.2 <i>Selection bias</i>	28
4.3 <i>Conceptualizing Reputation</i>	29
IV. DESCRIPTIVE STATISTICS	31
1. THE RECORD: 1995 – 2009	31
2. THE DISPUTANTS	35
3. THE TRADE AGREEMENTS	39
V. THEORY	41
1. INSTITUTIONAL COMPLEXITY IN INTERNATIONAL TRADE.....	41
2. INSTITUTIONAL EMBEDDEDNESS.....	44
3. WEAK VS. STRONG TIES	46
VI. EMPIRICAL ANALYSIS AND RESULTS	50
1. CONTROL VARIABLES.....	50
1.1 <i>Disputant Characteristics</i>	50
1.1.1 <i>Economic Pressures</i>	50
1.1.2 <i>Domestic Political Institutions</i>	51
1.2 <i>Case Characteristics</i>	53
2. EMPIRICAL RESULTS.....	55
VII. PROSPECTIVES	61
1. IMPLICATIONS	61
2. FUTURE RESEARCH.....	63
VIII. CONCLUSION	66

IX. BIBLIOGRAPHY69

ABBREVIATIONS

BIC	Brazil, India, China
DESTA	Design of Trade Agreements
DEV	Developing Countries
DS	Dispute Series
DSB	Dispute Settlement Body
DSM	Dispute Settlement Mechanism
DSP	Dispute Settlement Process
DSU	Dispute Settlement Understanding
EC	European Communities
EU	European Union
FTA	Free Trade Agreement
GATT	General Agreement on Tariffs and Trade
IL	International Law
IND	Industrialized Countries
IR	International Relations
LDC	Least Developed Countries
MFN	Most Favored Nation
PPM	Predicted Probabilities at the Mean
PTA	Preferential Trade Agreement
RTA	Regional Trade Agreement
US	United States
TPRM	Trade Policy Review Mechanism
WTO	World Trade Organization

I. INTRODUCTION

In recent decades, legalization within the international arena has strengthened. This phenomenon is evidenced through the increasing judicialization of international institutions.¹ A prevalent example is the rise in international dispute resolution regimes. Despite the lack of coercive enforcement pervasive in all areas of international law (IL), dispute resolution is conventionally treated as an instrument for promoting international cooperation (Axelrod and Keohane 1985; Guzman 2005; Raustiala 2006).² As famously noted by Louis Henkin (1971, p. 47), “almost all nations observe almost all principles of international law and almost all of their obligations almost all of the time.” This illustrates the somewhat puzzling effectiveness of international enforcement regimes. Absent any centralized sanctioning mechanism, IL and international relations (IR) scholars have deliberated on what function international adjudication serves, emphasizing different perspectives on how legal review affects international cooperation.

Conventional wisdom now holds that formal remedies and informal sanctions act in tandem to raise the costs of deviating from IL. According to Andrew Guzman (2008), the “three Rs of compliance” – reputation, reciprocity and retaliation – are the key to understanding adherence to international agreements. A growing preoccupation with international cooperation, in the absence of direct enforcement, has increased the theoretical centrality of reputational concerns as an informal causal mechanism promoting state compliance.³ Accordingly, references to the role of reputation are now found widely in the economics (Abreu and Gul 2000) and IR (Axelrod 1984; Keohane 1984) literature, but the concept remains underdeveloped in legal scholarship.

Despite varying degrees of cautiousness in their reliance on reputational arguments, all three disciplines have independently emphasized that international adjudication heightens the reputational costs of noncompliance to states. The logic is that states face greater reputational losses from violations because dispute resolution bodies authoritatively review whether an agreement has been breached under accepted standards and procedures, widely broadcasting it

¹ See generally Goldstein et al. 2000; Koremenos et al. 2001.

² In a separate and emerging strand of research, Brewster (2013) argues that a different causal relationship between dispute resolution and reputation may exist, challenging the conventional view that dispute resolution provisions act as a commit mechanism. See *infra* II.3.

³ See generally Axelrod 1984; Barrett 1999a, Barrett 199b, Brewster 2009a; Brewster 2009b; Brewster 2013; Chayes and Chayes 1993; Chayes and Chayes 1995; Downs and Jones 2002; Goldsmith and Posner 2005; Guzman 2002a, Guzman 2006; Guzman 2008; Keohane 1984; Maggi 199; Mercer 1996; Raustiala 2006; Tomz 2007.

to the international audience (Abbot and Snidal 2000; Helfer and Slaughter 2005, Schwartz and Sykes 2002). Some scholars argue that the threat of reputational sanctions is so significant that states are reluctant to establish international courts, even if they carry functional gains (Guzman 2002b; Guzman 2005).

This study theorizes and empirically examines whether states' concern for their reputational standing influences their strategic behavior during interstate dispute resolution. To do so we analyze state interaction with one institution: the World Trade Organization's (WTO) Dispute Settlement Mechanism (DSM), hailed as the "backbone of the multilateral trading system" (Moore 2005). Assessing reputation as an enforcement mechanism in the context of the multilateral trading regime seems particularly fruitful, considering the regime's unprecedented judicialization. The claim that state conduct is moderated by reputational concerns finds support from two sources: theoretically, as derived from a rational choice analysis of international institutions and state behavior, as well as, empirically, from evidence on settlement and concession-making observed at the pre-ruling stage.

Despite the DSM being one of the most developed dispute resolution institutions in the international arena, the WTO's remedial regime undermines the system's deterrent effect.⁴ Punishing violations is neither the main objective of the system, nor is it something that it is capable of effectively delivering. The structure of the dispute settlement process (DSP) permits respondents to delay dispute resolution proceedings for several years. During this time complaining states have no legal recourse under WTO rules, even for obvious trade violations (Bütler and Hauser 2000; Brewster 2011). Successful complainants can request compensation or retaliation only if compliance is not forthcoming after a ruling. Hence, Robert Hudec (1987, p. 218) claims that a ruling given by the Dispute Settlement Body (DSB) is a "punch that will not hit anyone."

However, empirical investigations of litigation in the multilateral trading regime reveal a noteworthy pattern: the majority of disputes settle early; either during consultations, or prior to the issuance of a panel ruling (Busch and Reinhardt 2000; Hudec 1993).⁵ This is surprising, considering that the system's remedial regime provides the defendant with strong economic incentives to keep any discriminatory measures in place as long as possible, opting for full adjudication instead of pre-ruling settlement (Brewster 2011; Busch and Reinhardt 2000). The observation that defendants at the WTO are willing to engage in early settlement and generous concession-making, then, presents an empirical puzzle. The existing literature

⁴ See *infra* II.1.2

⁵ The precise percentage of cases that have settled varies somewhat from one report to another, depending on how active cases are defined.

offers some suggestions to explain this behavior, but these are incomplete and difficult to reconcile with what we know about contracting and litigation at the international level.

Since structural features of WTO dispute settlement make the proceeding of cases all the way to judgment relatively less risky, we theorize that formal adjudication must be politically rather than economically costly. Specifically, it is argued that the fear of normative condemnation from an adverse panel ruling helps to explain evidence on early settlement (Busch and Reinhardt 2000). With every additional stage of the dispute settlement process, a dispute is likely to receive more attention and audience costs become increasingly more important. Considering that approximately 80 to 90 percent of rulings at the WTO are issued in favor of the complainant,⁶ adjudication exercises a deterrent effect, despite the absence of a coercive enforcement regime, by disseminating information on state conduct and, thereby, unleashing reputational pressures (Sattler et al. 2013). The “shadow of the law,” in the form of looming legal condemnation, then serves as an explanation toward observed patterns of early settlement, supporting Marc Busch and Eric Reinhardt’s (2000) apt observation that while an adverse ruling is a “punch that will not hit anyone”, it can make the defendant flinch.

An appreciation for this reputation-based mechanism becomes especially important when one applies the law and economics perspective that international agreements are unfinished, long-term contracts open to ongoing negotiations by its members. Arguably, the “shadow of the future” (Norman and Trachtman 2008), in the form of continued negotiations, highlights the importance of reputational sanctions. The reliability with which a state abides by its agreements determines its future range of beneficial agreements and the extent to which it is able to extract concessions in return (Barrett 1999a; Barrett 1999b; Guzman 2008). States with reputations for defecting on the agreed-to terms of their agreements will not be able to credibly commit to future cooperative endeavors, as observing parties will discount the expected value of agreements with such a state. An adverse ruling solidifies this impression, broadcasting to the international audience that the respondent is an unreliable treaty partner.

Building on the emerging stream of literature interested in the interaction between overlapping institutions, it is conjectured that the extent to which reputational concerns are

⁶ Conducting the most comprehensive analysis of the GATT dispute settlement procedure from 1948 to 1989, Hudec (1993) has found that the precursor to the current system resolved 88 percent of disputes in favor of complainants. Building on Hudec’s investigation, Guzman (2004) concludes that of the 108 panel rulings issued under the WTO until June 2003, 100 (93 percent) have represented a victory for the complainant. Maton and Maton (2007) conduct a detailed quantitative analysis of the complete history of rulings made by the DSB during its first ten years of operation. Analyzing disputes through 2004, the study finds that 81.9 percent of panel rulings and 78.4 percent of Appellate Body decisions were issued in favor of the complainant. Extending the analysis to 2007, Colares (2009) concludes that complainants are successful in 91 percent of cases. Most recently, Turk (2011) has noted that complainants win approximately 90 percent of disputes.

able to elicit early settlement is contingent on the degree to which the defendant is embedded in the wider trade realm. As conventionally argued by the institutionalist literature, integration operates as a commitment mechanism. This is in line with Kenneth Abbott and Duncan Snidal's (2000, p. 430) assertion that "legal commitments should be more credible when made by states with certain characteristics. Externally, participation in other international legal regimes should enhance credibility: it exposes states to greater reputational costs and makes them more vulnerable to countermeasures."

We follow the argument that states' environment of trade agreements affects dispute outcomes by extension. However, contrary to what the institutionalist suggests, we argue the fear of reputational spillovers exerts impetus for settlement in disputes involving defendants that are signatories of a few, shallow trade agreements. Specifically, the "shadow of the future" (Norman and Trachtman, 2008), in the form of ongoing trade negotiations, should heighten the sensitivity to reputational sanctions for states that have a lot to gain from further trade liberalization. Considering that the vast majority of cases are ruled in favor of the complainant, adjudication would reveal the defendant as an undesirable partner to its existing and potential future institutional partners, altering their bargaining position in reciprocal negotiations. The effects of an adverse ruling on reputation are largely anticipated during consultations, acting as a stimulus for early settlement. Conversely, for those defendants that are already deeply embedded in the trading realm and thus enjoy extensive market access, the marginal value of joining new agreements and/or expanding existing ones diminishes.

WTO dispute settlement, then, gains enforcement power by unleashing reputational pressures (Davis 2009). Our theory combines two emerging strands of research: In light of the fact the integrative process is continuing unabatedly, it is important to systematically analyze how embeddedness in the international trade milieu affects cooperation. Despite the growing number of trade accords, scholars possess little empirical knowledge concerning the interaction of these institutions, and even less exists that attempts to tie empirical results into a reasonably coherent framework. Moreover, a glance over the landscape of existing institutions suggests that trade agreements clearly exhibit major differences in terms of design and commitments reflected in the depth of concessions (Peevehouse et al. 2002). In order to accurately reflect the ability of trade agreements to impose costs on and withdraw benefits from their members, we need to account for institutional design variation.

To carry out our analysis we have created two original datasets: first, to quantify evidence on litigation at the WTO, we introduce two measurements of dispute outcomes. We apply a binary definition of dispute escalation by distinguishing cases that settle early and

those where a ruling is issued. Moreover, we have coded concessions for 376 disputes filed under the DSM from 1995-2009, the first 15 years of the system's operation. We build on existing work by Hudec (1993) and Busch and Reinhardt (2003), defining concessions as a liberalization of the disputed trade policy towards the complainant's demands. To operationalize the concept of institutional embeddedness, we compiled a second dataset consisting of 233 trade agreements disputants were signatories to during our observation period. The resulting list is one of the most accurate in terms of agreement membership and date of enforcement. To account for diverse levels of integration when estimating agreements' effects, we have included a measurement of depth, applying the additive depth index introduced by the design of trade agreements (DESTA) project (Dür et al. 2014). In order account for the fact that some provisions may be more relevant drivers of the depth of an agreement, we conducted a factor analysis to unravel unobserved, latent variable(s).

Despite its unique and central role in the international trading system, we are only beginning to understand how the DSM affects state behavior and litigation dynamics. While in a narrow sense, this study seeks to provide an explanation towards understanding one particular empirical puzzle in the multilateral trading regime, its findings have implications that apply in IL and IR more generally. Overall, the results offer broader insights into the intuitionist research agenda analyzing how IL and international institutions affect state behavior. Demonstrated here in the case of the WTO, lessons tie into general debates on the political economy of international dispute settlement, particularly the operation of reputational sanctions. At a time when trade agreements are increasing in visibility, it is important that the effect overlapping institutions exert on WTO disputes is analyzed in order to understand the value of dispute settlement system in a regionalized world. This will allow the trade agreements literature to better engage with the broader literature on international cooperation and international organizations, contributing actively to ongoing debates and advancements in research programs as diverse as legalization. Lastly, we hope that our original data will be of use for further empirical studies investigating WTO adjudication.

The chapter will proceed as follows: In the following Section, we present the background necessary to understand the empirical puzzle we are investigating. In Section III, we present our data and in Section IV we provide some descriptive statistics. Our theory is laid out in Section V. Section VI discusses our estimation technique and empirical results. Section VI presents some implications and avenues for future research. Section VI concludes.

II. BACKGROUND

1. WTO DSM: Changes from the GATT

When the DSM was formed in 1995, as part of the Uruguay Round establishing the WTO, it was considered the “jewel in the crown” (Bernauer et al. 2012, p. 1). It signifies the strengthened legalization of the institution and the promotion of multilateralism by effectively restricting unilateral behavior that hindered the WTO’s predecessor, the General Agreement on Tariffs and Trade (GATT). Specifically, the new enforcement regime successfully helped to overcome two fundamental and stagnating problems within the previous GATT dispute resolution system (Alter 2003): unilateral blocking of panel establishment or adoption of panel reports by unruly defendants,⁷ and 2) unilateral retaliation via trade sanctions by frustrated complainants. Additionally, as a precaution against “runaway panels” (Bernauer et al. 2012), a permanent Appellate Body was established. Essentially, these procedures provided the right to a panel through its veto free system but also, the right to appeal, as a way to balance and abate automatic panel decisions.

Another important novelty was a revised remedy scheme for WTO violations, explicitly prohibiting unilateral retaliation. Under the revised system, remedies are *conditional* upon findings of noncompliance after a panel ruling and are limited to *prospective* retaliation determined through arbitration. Herein provides the key to understanding the main objective of the new dispute resolution system under the WTO and also its weaknesses.

1.1 WTO DSM: Main Objectives

The objectives of the WTO dispute settlement are described in Article 3(2) of the Dispute Settlement Understanding (DSU). WTO dispute resolution intends to provide security and predictability in interpretations of treaty text, protect rights and obligations, clarify the provisions of the agreements, and promote promptness in resolving trade disputes. However, rather than issuing rulings or developing jurisprudence, the language of the DSU gives clear priority to negotiated settlement (DSU, Article 3.7). By requiring formal consultations as the outset of any dispute, the DSU provides a framework in which the parties must attempt to negotiate a settlement. Even when a dispute has progressed to formal adjudication, bilateral settlement remains possible and is encouraged throughout.

⁷ Whereas previously, the establishment of a panel or adoption of a panel report required unanimous support (allowing for a single country veto), now, the blocking of panel formation and adoption of panel reports has to be unanimous, implying the near automatic report of dispute resolution decisions.

As aforementioned, the revised DSP includes an explicit remedy regime.⁸ Among remedies, the systematized use of trade retaliation (“suspension of trade concessions and other obligations,” in trade parlance (DSU, Article 22) is one of the major innovations. Members agreed not to unilaterally retaliate against violators of trade rules, but only to the extent and in the form authorized by the arbitration panel. Only when authorized by the DSB may successful complainants suspend trade concessions *equal* to the level of injury caused by the violation (the state’s “nullification or impairment,” in WTO parlance) (Brewster 2011).

1.2 WTO DSM: Main Weaknesses

While the WTO provides punitive elements for continued breaches of WTO rules, punishing violations was neither the main objective of the system, nor is it something that it is capable of effectively delivering. Two main attributes of the WTO’s remedial scheme distinguish it from most contract-like remedy regimes (Goh and Ziegler 2003; Trachtman 2007): First, WTO panels solely grant *prospective* remedies, implying that trade retaliation must be based on the current effects of the defection. Moreover, remedies are only *conditional* on continued noncompliance after an adverse panel ruling. If the breaching state modifies a challenged policy or practice consistent with the adverse ruling, the complaining state(s) may not sanction it for its misconduct. Harm suffered from a violation is consequently not redressed if the respondent ceases its conduct within the stipulated timeframe. The conditional requirement means that deterrence is impossible, because a plaintiff can always spurn any formal retaliation by adhering to the DSB’s ruling.

Thus, it has been argued that the WTO’s remedial regime creates a “remedy gap” (Brewster 2011): states cannot react, even to clear trade violations, for years at a time until the end of adjudication (and then only with respect to the current effects of the violation). While there is the possibility of seeking compensation or permission to retaliate, these are temporary measures designed to incentivize a losing defendant to bring its trade policy into compliance (Mitchell 2007). There is no reference to a punitive objective in the DSU; the regime is concerned with redress for aggrieved members, rather than sanctioning respondents.

Note that the remedy gap would not be harmful if the timelines as specified in the DSU were met (Brewster 2011). As set out in the DSU, panels reports are to be issued within six months (DSU, Article 12.9) and appeals are to take 60 days (DSU, Article 17.5). However, both panels and the Appellate Body regularly fail to meet these time horizons. The

⁸ See generally Schwartz and Sykes (2002)

adoption of an Appellate Body report took on average more than two years for disputes filed between 2005 and 2009, thus over twice the time anticipated by the DSU (Brewster 2011). Added stages of compliance proceedings, appeal of the compliance review, and arbitration of suspension of concessions imply that dispute resolution can continue for several years before the DSB's definitive legal statement is issued.

Delays and extensions in the WTO's remedial scheme have significant adverse effects on the efficient functioning of the dispute settlement system. As argued by Rachel Brewster (2011), they create a *de facto* escape clause permitting states to violate WTO law during the entire dispute resolution process. During this time the complainant suffers continued economic loss if the contested measure is indeed in breach of WTO obligations. Brewster even argues that the *de facto* escape clause may be more lenient than the WTO's *de jure* escape clause, the Safeguards Agreement.

In the rare event that retaliation is authorized, it is almost never utilized and has only in a very limited number of cases been effective in bringing about implementation. Retaliation is not, in itself, an effective mechanism of enforcement and its limitations have been subject of substantial academic debate.⁹ Importantly, the WTO cannot impose sanctions to induce compliance, but instead "outsources punishment" to the aggrieved WTO member through retaliatory modifications of its trade policy (Torress 2012, p. 3).

Furthermore, although the reforms of the DSP created the belief that power would be equalized, not all states have the same practical ability to resort to unilateral enforcement of rules (Alter 2003). Even with increased legalization of the process, power-relationships remain an important element of rule enforcement in the WTO system (Bown 2005). Market size continues to translate into bilateral retaliatory capacity, implying that small economies may lack the leverage to effectively retaliate against defendants with large markets (Busch and Reinhardt 2003). Specifically, developing countries are often too poor to credibly threaten with retaliation, consuming such a minor proportion of the overall exports of rich countries that sanctions would be economically and politically insignificant.

Moreover, according to standard trade theory, economic sanctions are trade diminishing and impose substantial welfare costs on the target as well as the state seeking to retaliate through inefficiency arguments associated with the imposition of protectionist barriers (Feenstra 1992; Bhagwati 2000). When the remedy of choice is a withdrawal of concessions by the aggrieved member, a state inflicts economic pain on its own importers and retailers of the sanctioned product or industry, while its consumers suffer from higher prices.

⁹ See generally Bronckers and van den Broek (2005)

It is merely the complainant's import-competing sectors that gain temporary relief from prohibitive retaliatory tariffs imposed.

Despite such weaknesses, the WTO's DSM is undeniably one of the most legalized and effective international dispute resolution regimes. Since its inception in 1995, it has received over 480 cases and has been successful in increasing the participation of developing countries (Busch and Reinhardt 2003). Interestingly, we see high compliance not only with panel rulings, but also a high rate of concessions being made by the defendant before an adverse ruling is issued. This is surprising, given that the structure of the DSP permits noncompliance during legal proceedings. Defendants may subvert retaliation all together by adhering to the adverse ruling within the stipulated timeframe. In the rare event that retaliation is authorized, it is then nearly guaranteed to be economically less costly to the respondent than eliminating the discriminatory measure prior to a panel decision. As summarized by Brewster (2011, p. 131), "at the WTO, the violating state is actually worse off settling a case early."

2. Early Settlement and Concessions in Absence of Coercive Enforcement

Empirical investigations of litigation at the WTO reveal a noteworthy pattern: the majority of disputes settle early, either during consultation, or prior the issuance of a panel ruling. In this spirit, the likelihood of concessions from a defendant often decreases after a pro-complainant (or any) ruling, reminding us that the system works best when it encourages bargaining in the "shadow of the law" (Busch and Reinhardt 2000).

According to a pioneering study by Hudec (1993) analyzing 207 GATT disputes from 1948 to 1990, 64 (31 percent) cases were concluded via pre-ruling settlement. In 62 cases (97 percent) full or partial concessions were provided, defined as a change in the respective trade policy toward the complainant's demands. Building on Hudec's work, Busch and Reinhardt (2000) examined more than 600 GATT/WTO disputes from 1948 through 2000, concluding that 55 percent settled during consultations, while a further 8 percent settled during panel deliberations. Of these, 67 percent of cases were concluded with the defendant making either full or partial concessions.

Extending the considerable nucleus compiled by Hudec, and Busch and Reinhardt, we have quantified evidence on settlement patterns during the WTO's first fifteen years of operation – from its inception in 1995 through 2009. Presenting a comprehensive and original dataset, we find that in 145 cases (43 percent) of the 336 resolved cases, the disputing parties

settled during consultations or prior to the issuance of a panel ruling. In the vast majority of cases, full or partial concessions were provided by the defendant.

Thus, as the data indicates, settlement is clearly where the effectiveness of the regime manifests itself, supporting former WTO Director General Moore's (2005) sentiment defining settlement as the "key principle," essential for "safeguarding the delicate balance of international rights and obligations." This begs the question: why do defendants not only settle early but also provide high rates of full concessions, when the system's remedial regime provides the losing defendant with strong economic incentives to keep any discriminatory measures in place as long as possible?

In light of the primary objective of WTO dispute settlement to provide a framework encouraging negotiated settlement (DSU, Articles 3.7 and 11) and its evidenced effectiveness, it is surprising that little scholarship has considered how the system has performed in meeting its goal. More research is needed to analyze settlement patterns, addressing how legal review operates to promote international cooperation. Thus far, very little empirical work exists on the political economy of dispute settlement in the context of the WTO, and even less exists that attempts to tie empirical results into a coherent theoretical framework.

3. Reputation and Dispute Resolution Institutions

In the past decades, a growing preoccupation with international cooperation and its analytical underpinnings has increased the theoretical centrality of reputation as an enforcement mechanism sustaining IL. References are now found widely in the literature, although with varying degrees of cautiousness in their reliance on reputational arguments.¹⁰ The functioning of reputation remains among the most contested issues in IL and IR scholarship.¹¹

The most comprehensive treatment of reputation as a key analytical concept emanates from Guzman, defining reputation "as judgments about an actor's past response to international legal obligations used to predict future compliance with such obligations" (Guzman 2008, p. 73). In the standard model of reputation, international cooperation is framed as a repeated prisoner's dilemma game. All parties understand the underlying strategic situation and its implication that while collective gains emanate from cooperation, incentives

¹⁰ See generally Axelrod 1984; Barrett 1999a, Barrett 199b, Brewster 2009a; Brewster 2009b; Brewster 2013; Chayes and Chayes 1993; Chayes and Chayes 1995; Downs and Jones 2002; Goldsmith and Posner 2005; Guzman 2002a, Guzman 2006; Guzman 2008; Keohane 1984; Maggi 199; Mercer 1996; Raustiala 2006; Tomz 2007.

¹¹ See *infra*

for opportunistic defection persist. Interactions take place under uncertainty, with states unable to fully observe each other's preferences.¹² Without a centralized governing body to enforce agreements, states that contract at the international level are, thus, cautious in selecting their cooperative partners. Because states possess private information regarding their preferences, actions are assumed to be observable indicators, predictive of future behavior (Guzman 2002a). Rational states, thus, abide with agreements that are not in their immediate self-interest not because of their status as law and, thus, *pacta sunt servanda* (Franck 1998; Franck 1990), but based on a self-serving cost-benefit analysis (Abbott 1989).

However, researchers have emphasized different perspectives on the interaction between legal review, formal remedy regimes and informal sanctions. Conventional wisdom maintains that dispute resolution increases the level of commitment in an international agreement, facilitating the force of reputation via two distinct mechanisms: First, following managerial compliance theory, non-compliance with IL occurs in part due to ambiguity concerning legal rules (Chayes and Chayes 1993; Chayes and Chayes 1995). If the behavior IL proscribes is subject to interpretation, states may reach contradictory conclusions on whether some international obligation has been breached, thereby diminishing reputational sanctions. This is amplified by the fact that the international system is a noisy informational environment, making the observability and verifiability of state conduct difficult.

Legal review, thus, heightens reputational costs because it provides greater clarity about rights. International courts establish a legal framework that authoritatively adjudicates whether a member has breached its international commitments, creating precedence and increased certainty via consistent practice (Torres 2012). By forcing states to justify their conduct on a principled basis and by evaluating allegations and defenses under accepted standards and procedures, violating parties can no longer rely on the noisiness of the international system to disguise their actions.¹³ In the context of the multilateral trading regime, the DSM has generated consensus on acceptable trade policy standards and has clarified provisions in accordance with customary rules of interpretation (DSU, Article 3.2), thereby, increasing the normative strength of the negotiated agreements and promoting the status of international trade as a stable, rules-based regime unrivaled in IL (Torres 2012).

Second, the decision of international dispute resolution bodies is generally widely publicized and cheaply available to all members of the international community, including non-state actors. By highlighting and broadcasting information on state conduct, adjudicative

¹² Preferences are determined by the vagaries of domestic politics that are hard to observe and interpret by the international audience (Brewster 2013).

¹³ See generally Abbot and Snidal 2000; Posner and Yoo 2005; Raustiala 2005; Schwartz and Sykes 2002.

institutions effectively brand violating parties as being uncooperative treaty partners, thereby intensifying the reputational costs of non-compliant behavior (Guzman 2005). The more accessible and reliable the information, the more likely the audience will incorporate it into its assessment of current and potential cooperative partners.

The WTO serves as a vehicle for transmitting information throughout the trading system, particularly through its DSM and other surveillance mechanisms, such as the Trade Policy Review Mechanism (TPRM) (Schwartz and Sykes 2002). It maintains and provides easy access to data on all WTO cases, thereby increasing the transparency of its members' conduct. With every additional stage of the dispute settlement process, disputes receive more attention and audience costs become increasingly more important (Sattler et al. 2013).

In a separate and emerging strand of research, Brewster (2013) argues that a different causal relationship between dispute resolution institutions and reputation may exist, challenging the conventional view that dispute resolution provisions act as a commit mechanism. According to her argument, dispute resolution systems that include formal remedy provisions may legitimize deviations from an agreement's substantive first-order rules, thereby, crowding out informal sanctions. By pricing breach and, thus, selling an alternative to compliance, legal review permits states to deviate from their obligations, as long as they comply with the proscribed remedy, the agreement's second-order rules. Allowing for mandatory conflict resolution therefore decreases the force of reputational sanctions and grants parties' greater leeway in meeting their international obligations, adding flexibility to a regime.

4. Puzzle and Hypotheses

In the multilateral trading regime, as Jagdish Bhagwati (1991, p. 55) has put it, "the sheriff is asleep at the saloon." A country can violate WTO rules until it loses a dispute settlement case and, without cost, drag out implementation until the day retaliation is at hand. Considering that structural features of the DSM undermine the system's deterrent effect, this leads us to expect that the system's remedial regime to provide the losing defendant with economic incentives to keep discriminatory measures in place as long as possible, delaying dispute resolution proceedings for several years by opting for adjudication instead of early settlement (Bütler and Hauser 2000).

Similarly, domestic political pressures in the defendant country are likely to further increase pressures for prolonging non-compliance, increasing domestic political costs of

concession-making. Todd Allee and Paul Huth (2006), for example, show that under conditions of high political stakes, governments opt for international adjudication instead of settling if they are in need of “political cover” to settle a controversial dispute. This makes observed patterns of early settlement even more puzzling, as international courts can be used as a “scapegoat” to absolve states from taking actions that domestic constituencies would oppose (Cooper 1986).

However, pre-ruling settlement and generous concession-making are the norm, rather than the exception, illustrating the somewhat puzzling effectiveness of the WTO’s enforcement regime. Considering that the threat of economic pain is not sufficiently credible to preclude litigation, the expected costs of formal adjudication must be considerably higher than the prospect of retaliation itself. Therefore, we theorize that formal adjudication may be politically rather than economically costly. Adjudication exercises a deterrent effect, despite the absence of a coercive enforcement regime, by disseminating information on state conduct and, thereby, unleashing reputational pressures. Considering the likelihood of an adverse ruling, we expect that states fear the high risk of being called out an unreliable treaty partner. The “shadow of the law,” in the form of looming legal condemnation, then serves as an explanation toward observed patterns of early settlement (Busch and Reinhardt 2000).

Building on the emerging stream of literature interested in the interaction between overlapping institutions, we thus argue that the extent to which reputational concerns are able to elicit early settlement is contingent on the degree to which the defendant is embedded in the wider trade realm. Drawing on the law and economics perspective characterizing international agreements as open contracts, we argue the fear of reputational spillovers acts as a deterrent for defendants that are signatories to a few, shallow external trade agreements. The “shadow of the future” (Norman and Trachtman 2008), in the form of ongoing trade negotiations, heightens the sensitivity to reputational sanctions for states with a strong potential to increasing market access in the future. Our main hypothesis that follows:

H₁: Early settlement should be more pronounced among defendants that are less integrated in the international trade realm.

III. RESEARCH DESIGN

This study reviews certain operational aspects and dynamics of dispute settlement at the WTO during the system's first fifteen years – from its inception in 1995 through 2009.¹⁴ We now present a description and justification of the variables, indicators, and coding procedures, as well as a comprehensive discussion of the advantages and limitations of the data.

1. Unit of Observation

To quantify evidence on the patterns of settlement outcomes in cases that have been submitted to the WTO dispute settlement process, we present an original dataset of WTO disputes.

The first step in constructing the dataset for was to select the appropriate unit of analysis. A complaint arises when at least one WTO member requests consultations with another pursuant to the provisions of the DSU. For each complaint, the WTO Secretariat assigns an individual Dispute Series (DS) number. Prior to 2010, 402 official requests for consultations were filed, thereby invoking formal WTO proceedings and alleging the infringement of specific rights. However, disputes as categorized by the WTO do not precisely correspond to the number and range of trade policies, which have been litigated through the DSM (Leitner and Leester 2011). Some DS numbers involve claims brought by multiple complainants, whereas other cases relate to the same disputing parties and are similar in terms of measures and legal claims at issue, but involve separate formal dispute initiations. Thus, conceptual consistency cannot be maintained by analyzing all disputes, classified by their WTO DS numbers, as equal units. What constitutes a “dispute,” thus needs to be redefined for the purpose of this study.

There are various ways in which this could be done, and there is no single correct method applicable across research interests. In the construction of our dataset, we turn to the reclassification of the raw data introduced by Henrik Horn et al. (1999), extending their data with recent records (see Appendix A). While such coding involves personal judgment, we used the judgments of two independent coders checking each case.

First, since settlement may, in principle, occur bilaterally in disputes involving multiple complainants, multiple-state disputes are disaggregated into a series of dyadic disputes equal to the number of complainants involved, even if the requests for consultation

¹⁴ We do not include more recent consultation requests, because many involve pending cases, where panels have not yet had a chance to form or issue rulings. However, after fifteen years of dispute settlement, enough cases have been handled and sufficient data exists to permit an empirical analysis of the process.

were filed jointly.¹⁵ This method enables a detailed examination of bilateral legal relations, while the dataset retains all original complaints that were filed invoking WTO proceedings.

Second, certain disputes appear multiple times as separate WTO cases. Because consultations exceeding 12 months need to be renewed, a further request for consultation may be filed to follow up on the former. Since the legal claims, as defined in the WTO case law on Art. 6.2 DSU, are the same, these cases are classified as one dispute to avoid double counting. This adjustment is to a certain degree subjective, as it involves judgment as to the degree of similarity and overlap between complaints. Again, coding has been conducted by two independent coders.

To clarify this approach, it is useful to consider a typical dispute under examination. The *Bananas* dispute serves as a case in point for how such modifications are conducted. In 1995, four countries requested consultation with the European Communities (EC) regarding its banana regime, which was assigned the WTO DS number 16 (DS16). The following year, the complaint was superseded by a renewed request for consultation, DS27, filed by the four initial complainants plus an additional country. Since the substantive dispute was the same, both requests are treated as referring to the same underlying case. Moreover, since we view disputes at a bilateral level, complaints are separated into each constituent pair of disputants: EC vs. Ecuador, Guatemala, Honduras, Mexico, and the United States (US), respectively.

The final form of modification concerns WTO disputes involving individual EC countries as defendants. The convention is to treat disputes as directed against the EC instead of the individual member to avoid double counting. For example, DS125 (*Greece – Enforcement of Intellectual Property Rights for Motion Pictures and Television Programs*) is incorporated into DS124 (*European Communities – Enforcement of Intellectual Property Rights for Motion Pictures and Television Programs*). In a similar vein, when several EC countries respond to the same allegations, they are regarded as one bilateral dispute, with the EC acting as respondent. Consequently, DS83 (*Denmark – Measures Affecting the Enforcement of Intellectual Property Rights*) and DS86 (*Sweden – Measures Affecting the Enforcement of Intellectual Property Rights*) are reclassified as one case against the EC.

2. Dependent Variable

The dependent variable in our study is measured in terms of dispute outcomes, defined as the ultimate policy result of a dispute, not as the nature of a ruling per se (Hudec 1993). Dispute

¹⁵ For other studies using this approach, see Busch 2000; Busch and Reinhardt 2000; Busch and Reinhardt 2002; Reinhardt 2000.

outcomes in empirical studies on GATT/WTO dispute settlement have been conceptualized either in terms of concessions by the defendant (Busch and Reinhardt 2003; Karreth 2009) or dispute escalation (Guzman and Simmons 2002; Sattler et al. 2013).

This study combines data on both measurements of dispute outcomes. While dispute escalation is our main dependent variable, we have compiled data on concession-making in order to fully understand the success underwritten by the WTO at the different stages of legal proceedings.

2.1 Dispute Escalation

We have identified two main empirical studies that have analyzed dispute outcomes in terms of dispute escalation. Andrew Guzman and Beth Simmons (2002) distinguished cases filed at the WTO according to whether they were solved during consultation stage or whether a panel was formed. Conversely, Thomas Sattler et al. (2013) have brought forward a three-step coding of dispute escalation. Their dependent variable measures whether a dispute is resolved during the consultation phase, whether it ends in compliance after a panel or appellate body ruling, or whether it further escalates into a dispute about compliance with the WTO verdict.

Diverging slightly from these two conceptualizations, we have used a binary definition of dispute escalation – whether a dispute reaches the stage of a panel ruling (1) or not (0). Under early settlement, we include all cases that came to a conclusion within one of these three stages:

- At the stage requiring consultations
- After the stage of requiring a panel, but before the stage of composing the panel
- After the stage of composing the panel and during panel proceedings, but prior to the issuance of final panel ruling

The majority of disputes end prior to a panel ruling, and most of these without a request for a panel even being made (Busch and Reinhardt 2000).

2.2 Concessions by the Defendant

In order to quantify compliance with WTO law, we analyze concessions made by defendants, either through early settlement or after a panel ruling. This allows us to investigate whether

the strategic behavior of states differs with regard to the substantive first-order rules or the second-order rules of an agreement.

Dispute data is derived and coded exclusively from official WTO documents and builds on the considerable nucleus compiled by Hudec (1993), and Busch and Reinhardt (2000). As is the convention in the literature, we have identified and coded three different levels of concessions. Specifically, we have quantified concessions as a categorical variable that can take the value of 2 for full concessions, 1 for partial concessions, and 0 for no concessions (see Appendix B).

Concessions are coded as full when the contested measure has been completely amended/ revoked within the established “reasonable period of time.” For example, in *China - Measures Related to the Exportation of Raw Materials* (DS394, DS395, DS398), the panel and Appellate Body reports against the defendant were adopted on February 22nd, 2012. On May 24th, 2012, China and the US, European Union (EU), and Mexico (complainants) concluded that the “reasonable period of time” for the defendant to implement the DSB rulings would expire on December 31st, 2012. Accordingly, China was able to comply within the agreed to time period, by declaring the *2013 Tariff Implementation Program* and the *2013 Catalogue of Goods Subject to Export Licensing Administration*, which effectively removed the contested application of export duties and export quotas on certain raw materials, thereby, implementing the DSB’s rulings.

Partial concessions are given when the contested measure has been partially removed, removed after a long period of time, or when a multi-year time frame is allowed for the implementation of a panel report. An example of a partially amended violation can be found in *China - Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products* (DS363), where China appropriately amended the contested measures, except for those concerning films for theatrical release due to “sensitivity.” The dispute was formally concluded through a bilateral Memorandum of Understanding, in which the disputants agreed to engage in consultations after a period of five years. Additionally, *United States - Subsidies on Upland Cotton* (DS267) provides an example of a case where the defendant (US) effectively delayed proper implementation of DSB rulings. The panel and Appellate Body reports were adopted on March 21st, 2005. The complainant (Brazil) requested a compliance panel proceeding, where the US was again found to be in noncompliance. This finding was upheld by the Appellate Body in June 2008, after the US’ attempt to appeal. It was not until August 2010, that Brazil and the US concluded a Framework for a Mutually Agreed Solution (which itself was not a formal solution). As long

as the Framework was in effect, Brazil agreed not to impose authorized countermeasures. Finally, the case was formally terminated with the US concessions listed in a Memorandum of Understanding, concluded on October 2nd, 2014.

We code no concessions when defendants do not adhere to an adverse panel ruling, not revoking the violating measure. *European Communities - Measures Affecting the Approval and marketing of Biotech Products* (DS291, DS292, DS293), serves as a case in point. Although the defendant (EU) reached a formal mutually agreed solution with two of the complainants (Canada and Argentina), no concessions were made. Instead, the solution refers to the establishment of a “dialogue” regarding market access issues.¹⁶ The remaining complainant (US), however, decided to temporarily suspend remedy procedures until it requests for their resumption. The EU submitted their latest communication on October 9th, 2014, where it states “following the mutually agreed solutions” with the other two parties, “the European Union remains ready to continue its discussions with the United States with the goal of resolving this dispute...”¹⁷ No actual, domestic legal changes to bring the defendant closer to compliance however, have been made.

Consistent with existing research, we see a surprising amount of full concessions made by the defendant prior to the issuance of a ruling (Busch and Reinhardt 2000). However, early settlement rates appears to be much higher than one would expect from looking at the overview of WTO disputes, which lists approximately one-third of all consultation requests prior to January 1st, 2010, as pending. The reason is that there is a relatively large gray area of inactive consultations among the cases currently recorded as pending consultations by the WTO. In the majority of cases there has been no reported activity in the past years, implying that a large number of these proceedings have been resolved during consultations, but settlement was never notified to the WTO Secretariat.

Regrettably, cases labeled as “in consultations,” “panel established, but not yet composed” and “authority for panel lapsed,” are conventionally ignored by studies that investigate empirical evidence on WTO dispute settlement by categorizing them as “inactive.” Guzman and Simmons (2002), for example, have excluded all cases that are officially pending in consultations, with the exception of those that have been in this stage for over three years. Since they are primarily interested in which cases at the WTO get empaneled, they have treated those cases as “nonpaneled.”

¹⁶ WT/DS292/40 & WT/DS293/41

¹⁷ WT/DS291/37/Add.80

We go beyond the convention by actively reviewing the literature, as well as the websites of foreign, trade and economic ministries in order to obtain information on unreported, resolved cases. As the data shows, in a considerable amount of these cases settlement was indeed reached but never notified to the WTO. For example, while officially DS15 and DS49 remain in consultations, WTO documents state that, although there has been no formal notification, both cases appear to have settled bilaterally. Specifically, after some investigation, we found that 66 of 116 pending cases in our dataset are actually resolved via early settlement. The resulting dataset is thus – to the best of our knowledge – the most complete in terms of disputes covered and concessions coded.

3. Independent Variables

We argue that states' wider integration in the international trading system is crucial in explaining their incentives and conduct in trade disputes brought to the WTO (Abbot and Snidal 2000; Karreth 2012). The concept of institutional embeddedness is operationalized by taking the count of the defendant's memberships in external trade agreements. Moreover, we intend to show the importance of institutional design when estimating agreements' effects.

3.1 Trade Agreement Data Compilation Method

In order to reach an overview of trade accords, we have invested substantial effort in establishing a comprehensive and up-to-date list of trade agreements in force for WTO disputants in the first fifteen years of the organization's operation. While our compilation primarily builds on the list of agreements notified to the WTO (137 of 233 agreements also appear in that list), this database has two main weaknesses: First, it only includes information on trade agreements that have been officially notified to the organization by one of its members. Secondly, the database only covers accords that are currently in force. Since trade agreements, as delimited by the WTO, do not correspond precisely to the number of accords which have been in force during our observation period, relying solely on the WTO database does not provide a satisfactory foundation.

We thus added agreements that we uncovered from several other official sources, including the lists maintained by the World Bank's Global Preferential Trade Agreements Database (Tuck Trade Agreements Database) and the Organization of American State's

Foreign Trade Information Systems.¹⁸ Finally, data was derived and coded by systematically searching the websites of foreign, trade and economic ministries.¹⁹ The resulting list is – to the best of our knowledge – one of the most accurate in terms of agreement membership and date of enforcement.

The sample is comprehensive, spans all continents, and includes the majority of states worldwide. There are no categorical restrictions on the type of agreement, with free trade areas, customs unions, common markets, and economic unions all represented. Similarly, we do not place any restrictions on the number of signatories, including bilateral, regional as well as multilateral agreements. With such a diverse set of possible trade agreements, it is necessary to apply certain criteria to maximize the comparability of our findings. We, thus, turn to the classification introduced by Peevehouse et al. (2002).

First, while concessions must not be equivalent or strictly simultaneous, liberalization must be reciprocal. Some of the agreements listed grant less developed members sectoral exemptions or additional time to comply (i.e., the Caribbean Community). But at least among some core signatories, reciprocal market access must be the rule. Agreements that provide for unilateral liberalization (i.e., the South Pacific Regional Trade and Economic Cooperation Agreement) are thus excluded. Where concessions are unilateral, dispute settlement dynamics are likely driven by a logic distinct from that analyzed in this study.

Second, liberalization must be relatively broad, implying that the coverage of at least merchandise trade must be comprehensive. Where liberalization commitments are narrow in scope they should have limited ability to influence state conduct. Thus, narrow sectorial initiatives, such as the MERCOSUR - Mexico Auto Sector Agreement, fall short of this standard. Economic cooperation agreements that do not aim to achieve trade liberalization are also excluded. Similarly, framework agreements (like the Latin American Integration Association), within which specific trade pacts are negotiated, are also omitted.

Third, the agreements must have been enforced by 2009. Negotiations that did not produce specific liberalization commitments by the end of 2009 are excluded, while agreements in which implementation was, at that point, incomplete but in which liberalization had begun are incorporated. We opted for the year of entry into force rather than the year signature of an agreement, as it is the moment that we expect disputants to start worrying

¹⁸ These databases are available at: http://www.wto.org/english/tratop_e/region_e/region_e.htm; http://wits.worldbank.org/gptad/database_landing.aspx; <http://www.sice.oas.org/>

¹⁹ Several scholars have taken advantage of the available data to conduct empirical inquiries into the WTO and its dispute resolution process. The additional agreements that we found were not notified to the WTO, and thus have not made it into many of the datasets on trade agreements that are based on the WTO's inventory.

about the reputational sanctions emanating from noncompliance. Finally, we did not include interim agreements (thus, no accords with the Palestinian Authority are included).

Trade agreements that failed to meet one or more of the following requirements did not qualify for this study. Ultimately, we identified 242 agreements, for which we compiled their membership and entry into force. Regrettably, nine agreements were omitted from our dataset, as DESTA does not have coding on their depth (see Appendix C). The remaining 233 agreements are listed in Appendix D. The coding has been carried out manually by two independent coders. Moreover, crosschecks against other datasets that were put together independently from ours have confirmed the reliability of our data.

3.2 Conceptualization and Measurement of Depth

The ever-growing number and the increasing political and economic significance of trade agreements is one of the hallmarks of the current global economy. A large literature has studied various aspects of this phenomenon, known as the new regionalism (Mansfield and Milner 1999). Until recently, however, research has paid only scant attention to variation across agreements in terms of content and design, treating all agreements as if they were equal in purpose and effect.

A glance over the landscape of these institutions suggests that trade agreements clearly exhibit major differences in terms of design, overall ambitions and commitments reflected in the depth of concessions. Given the growing evidence on the significance of institutional variation for the ability of organizations to oversee economic, social, and political matters, a framework to compare them in a systematic manner is required (Dür et al. 2014). In order to accurately reflect the ability of trade agreements to impose costs on and withdraw benefits from their members, we need to account for institutional design variation.

There are various ways in which this could be done, and there is no single correct method applicable across research interests. Both the substantive terms of liberalization, as well as the degree of institutionalization constitute bargaining dimensions that have proven contentious in recent trade negotiations, underscoring their political salience. Nevertheless, research on these particular issues remains scarce.

In this paper, we focus on a specific aspect of international trade agreements: the depth of trade agreements, defined as “the extent to which (an agreement) requires states to depart from what they would have done in its absence” (Downs et al. 1996, p. 383). Conceptualizing trade agreements as instruments that can produce credible commitment to a “rule-based

regional cooperation,” institutionalists assert that the level of integration determines the agreements effects (Haftel 2013).

The conceptualization of depth adopted in this study is based on the DESTA dataset.²⁰ To operationalize variable levels of integration, the metric identifies seven main indicators that capture the proposed depth an agreement. Specifically, in order to capture basic differences in the level of commitment, the project has produced an additive index that combines seven key provisions that can be found in trade agreements. The provisions include: complete tariff reductions (full free trade area (FTA)), services trade, investments, standards, public procurement, competition and intellectual property rights. For each of these areas, it has been coded whether agreements contain any of these substantive provisions. Each variable is equally weighted and treated as contributing towards the depth of an agreement.

In order account for the fact that some provisions may be more relevant drivers of the depth of an agreement than others, we conducted a factor analysis to unravel unobserved, latent variable(s). We do so, as the analysis offers a transparent statistical technique, which suggests weights that different variables should have within the overall indicator (Blume and Voigt 2007). Essentially, the analysis condenses information found in the variables from the additive index into latent factors by assessing the underlying variation (Blume and Voigt 2007). This provides us with a weighted sum of the additive variable, which weighs Services the most and full FTA’s the least. This allows us to account for the level of integration prescribed by the agreement through a weighted variable.

The novel data allows us to revisit the literature on the effect of trade agreements. Our additional insight is that reputational pressures are driven by “the shadow of the future (Norman and Trachtman 2008). We conjecture that where the proposed level of integration is shallow, future cooperation should be more valuable than where integration already is extensive. Of particular interest is the result that provisions included in trade accords that do not directly concern tariffs – such as those liberalizing services trade or protecting investments and intellectual property rights – have a significant impact on the strategic behavior of states.

Untangling the “spaghetti bowl” (Bhagwati 1995) of trade agreements and incorporating variations across their content and design, rather than treating all agreements as if they were the same, should assist researchers in better understanding both why states sign

²⁰ So far most of the literature has suffered from lack of data on the design of trade agreements. DESTA fills this void by providing a clear and quantifiable metric that fosters a systematic comparison of accords. Having coded 587 agreements for more than 100 items and design features, the dataset is the most comprehensive in terms of number of accords included and items coded.

trade agreements and what effects these can be expected to have. This will allow the trade agreements literature to better engage with the broader literature on international cooperation and international organizations, contributing actively to ongoing debates and advancements in research programs as diverse as legalization.

4. Data and Measurement Challenges

Before one can conduct empirical work on WTO disputes, one has to make a number of choices regarding the analytical set up of the study, and several complexities may arise. Of course, these obstacles are also relevant for qualitative or “case study” analysis of dispute settlement.

4.1 Treatment of the EU

Recall that we treat cases involving individual EU member states as defendants as directed against the EC to avoid double counting. In a similar vein, when several EU countries respond to the same allegations, they are regarded as one bilateral dispute, with the EC acting as respondent.²¹

Even during the GATT days, the EC had *de facto* recognition as a member by other GATT countries. As early as 1960, members directly negotiated with the EC and not individual member states (Bermejo Garcia and Garcandia Garmedia 2012). With the creation of the WTO by the Marrakesh Agreement, the EC was formally recognized in Article XI, which identifies individual EC member states and the EC, itself, as original members of the newly created multilateral institution. However, it was not until the Treaty of Lisbon (2007), that the EU was finally recognized as a legal personality, enshrined in Article 47 of the Treaty on the EU. Essentially, by granting the Union with legal personality, it was now a subject of international law and could therefore, join international agreements.

Thus, we believe that our modification is legally appropriate in the context of our analysis. While particularly in the early years of the WTO a series of disputes were filed solely against individual EU members, no case was ever litigated by the respective member state alone. Pursuant to internal rules, the European Commission joined dispute settlement proceedings and supported its member state(s) from consultations on, providing expertise and

²¹ This is the convention in the field. For other studies using this approach *see* Guzman and Simmons 2002; Horn et al. 1999.

coordinating the defensive line (Hoffmeister 2012). Today, the Commission represents as a single litigant member states in all WTO litigation.

4.2 Selection bias

Among the most obvious issues in studying dispute settlement is the potential problem of selection bias. Many trade disputes – including ones with obvious legal merits – are never filed at the WTO (Busch and Reinhardt 2002). Devoting resources to litigation is costly, the state alleging the violation may not want to draw attention to the protectionist measures it, too, exercises (Petersmann 1994; Reinhard 2000a, Reinhardt 2000b); or the disputants may believe that resolution is more likely in the “shadow of the law” (Moonkin and Wilson 1998).

Consequently, there may be some unobserved variable (s), which predict those complaints that get “selected” for dispute settlement (Busch and Reinhardt 2002). However, we believe that sufficient variation within those disputes that were formally filed at the WTO exists to gain valuable insight into the basic contours of how WTO adjudication operates in practice. Specifically, in our data all stages of dispute escalation are preserved. Of the 376 distinct disputes initiated prior to January 1st, 2010, 116 cases are at least formally unresolved, with 15 inactive proceedings and 101 disputes officially pending in consultations. Following Hudec’s (1993) argument, by examining all cases, paneled or not, this variety gives us sufficient leverage to examine the effect of the “shadow of the law” (Busch and Reinhardt 2000; Busch and Reinhardt 2002).

Nevertheless, we must acknowledge that despite ample variation in the dataset, it can still be systematically biased. This is indicated by previous research, which has analyzed which disputes are selected to be brought to the WTO (Busch 2007). Research suggests that disputants’ legal capacity or fear of retaliation may hinder the initiation of disputes at the WTO (Bown 2005; Bechtel and Sattler 2013). This argument implies that initiation and litigation acts as a settlement device for mostly large and rich countries (Bechtel and Sattler 2013). While we find this to be true in Section IV, we also find that the two of the biggest power players (US and EU) in the WTO forum are (increasingly) the most targeted by industrialized and developing countries. Another factor that may influence selection is that complainants only initiate cases that they believe to be strong (Turk 2011). Christina Davis (2009), on the other hand, observes that actors push the most contentious topics into the negotiation rounds of the WTO, while noncontroversial issues are settled via bilateral or regional venues. Moreover, and most important for our argument, we realize that states’ who

care for their reputational standing may want to settle a dispute before it is brought to the international stage and thus the WTO.

All of these arguments and studies suggest that there may be an inherent strategic bias underlying the selection of disputes brought to the WTO. In other words, the sample of disputes in our study could be non-random, which constitutes the greatest challenge to our identification. However, as Karreth (2012, p.16) argues, without the availability of “more refined data, the quality of the case is unobservable.”

4.3 Conceptualizing Reputation

A weakness of a reputation-based approach is that reputation is a slippery concept, which is difficult to observe or measure objectively. Reputational costs and benefits are not susceptible to direct empirical observation, and must be inferred from the parties’ behavior and are, thus, difficult to measure in an objective manner. Consequently, we are faced with the challenge of assessing an inherently relational phenomenon that lacks obvious material indicators signifying its presence.

Nevertheless, this difficulty must be faced, as a consensus has emerged that reputation plays some role in the function of international institutions regimes. As the use of reputation as an explanatory tool in IL has increased, the concept has received criticism. Specifically, three main lines of inquiry deserve further investigation:

- *The relevant unit of analysis*: The proper way to model state behaviour continues to be debated and to date there exists no consensus as to whether reputation belongs to the state, or should be ascribed to the government making the decisions (Brewster 2009a; Brewster 2009b, Brewster 2013; Guzman 2008;).
- *The formation of reputation*: Contemporary scholarship applies reputation as a causal mechanism. Reputation formation is not treated as a problem in itself; rather the state is constructed as a black box (Mercer 1996; van Aaken 2014).
- *The scope of reputation*: Commentators generally argue that states have not one, generalized reputation, but instead have many compartmentalized reputations (Brewster 2009a; Brewster 2009b; Brewster 2013; Downes and Jones 2002; Guzman 2008).

While we acknowledge the need to reconceptualise reputation with respect to all three dimensions, we believe that these problems are tackled sufficiently for the purpose of our study. The relevant unit of analysis is a contested issue present in all areas of IL. The

convention in the field is to use the state as the primary unit of analysis, assuming that states are unitary and rational actors. Future research could test whether accounting for government changes affects the results of our study.

Considering the formation of reputation, like so much else in the international arena, settlement at the WTO is affected by domestic politics. States value reputation differently, which in turn is determined by the vagaries of domestic politics that are difficult to monitor and interpret by other states. Even in a case study, it is thus inherently difficult to account for the complex domestic political influences on trade negotiations. By controlling for regime type, agricultural cases, as well as politically sensitive disputes, we go beyond the convention to account for the influence domestic politics exert on trade dispute adjudication.

With regard to the scope of reputation, we acknowledge that the reputational consequences to a state will depend on how broadly the international audience draws inferences from specific compliance decisions (Brewster 2009a; Brewster 2009b, Brewster 2013). In current scholarly debate, reputation is discussed in broad and unified terms (Guzman 2008). States are assumed to carry a single reputation for compliance with IL that determines their expected attractiveness as a cooperative partner in all areas of IL. A major criticism of the current conceptualization of reputation is that commentators have argued that reputational consequences are more fragmented than unitary theory suggests.²² However, our aim is not to participate in the discussion on how far reputational consequences are fragmented. We do not argue or intend to test whether a compliance decision in connection with the WTO carries informational content for predicting future in all areas of IL. We merely hypothesize and intend to demonstrate that behavioral decisions within the WTO carry informational content for predicting future behavior in the realm of international trade. Evidence based on our dataset of 376 trade disputes from 1995 to 2009 provides support for this claim.

Given the complexity of these measurement problems, we intend to offer a first cut toward the goal of developing conceptual approximations capturing state reputation in the trade realm. The measurement of reputation presented here ranks among the few attempts to provide a coherent operationalization of reputational concerns for empirical studies.

²² The argument that reputation is compartmentalized across issue areas has most notably been taken up by: Brewster 2009a; Brewster 2009b; Brewster 2013; Downs and Jones 2002; Guzman 2008.

IV. DESCRIPTIVE STATISTICS

1. The Record: 1995 – 2009

From January 1st, 1995 to December 31st, 2009 we have identified a total of 376 distinct cases. Based on our reclassification of the raw the data, the amount of cases analyzed is slightly lower than the number of formal consultation requests that have been notified to the DSB.

Table 1 contains a breakdown of the status of all WTO cases from January 1995 through December 2009. In particular, we notice that the first years were characterized by extensive use of the system. This period was especially notable for carryover cases from the days of GATT and a focus on the implementation of Uruguay Results (Davey 2013).

TABLE 1: Statistical overview of settlement patterns at the WTO: 1995 - 2009

Status of Disputes	Disputes initiated		
	1995 - 1999	2000 - 2004	2005 - 2009
Total number of distinct requests for consultation	170	135	71
Complaints notified (as noted on the WTO website) ¹	185	139	78
Cases in progress	55	44	25
Before panels or the Appellate Body ²	0	1	7
	(0%)	(1%)	(13%)
In consultations	50	37	14
Inactive cases ³	5	6	4
Panel or Appellate Body report adopted	76	66	33
	(66%)	(72%)	(62%)
Early settlement⁴	39	25	13
	(34%)	(27%)	(24%)

Note: The figures in parentheses reflect the row's percent of the total resolved cases.

EXPLANATORY NOTES

¹ This category encompasses all requests for consultations notified to the WTO, including those requests which have led to panel and appellate review proceedings.

² This category encompasses pending panel proceedings or appellate review proceedings. This includes disputes where compliance proceedings are ongoing or disputes where the reasonable period of time for implementation has not yet expired.

³ This category encompasses all cases where panelists have not been chosen or the panel proceedings were suspended under Article 12.12 of the DSU, and not resumed after 12 months. It does not include reports resulting from proceedings pursuant to Article 21.5 of the DSU.

⁴ This category encompasses all cases where the contested measure was terminated, as well as those cases that reached a mutually agreed solution under Article 3.6 of the DSU, notified prior to the adoption of a panel report.

As can be seen, in 183 of the 376 disputes initiated prior to January 1st, 2010, a DSB ruling adopting a panel and Appellate Body report has been issued. 175 of those cases have been resolved, while in the remaining eight disputes, compliance proceedings are either ongoing or

the reasonable period of time for implementation has not yet expired.²³ In 77 other disputes, the parties settled either during consultations or prior to the issuance of a panel ruling. The remaining 116 cases are at least formally unresolved, with 15 inactive proceedings²⁴ and 101 disputes officially pending in consultations.

To sum up, 260 of the 376 consultation requests issued prior to 2010 have officially been pursued via panel proceedings or bilateral settlement, with 30 percent of these settling prior to the adoption of a panel report. While there is a minor tendency toward fewer settlements for the whole period of 1995 – 2009, pre-ruling settlement continues to be the norm, rather than the exception. Considering the explicit aim of WTO dispute settlement, the fact that many cases do not go through all stages of the dispute settlement procedure suggests that the system has performed relatively well in providing an effective means through which members are able to resolve their trade-related disputes.

Note that the precise percentage of cases that have settled varies somewhat from one report to another, depending on how the officially unresolved cases are treated. Since the majority of these proceedings have no reported activity in the past years, cases labeled as “in consultations,” “panel established, but not yet composed” and “authority for panel lapsed,” are conventionally ignored by studies that investigate empirical evidence on WTO dispute settlement by categorizing them as “inactive.” However, as argued elsewhere, a high number of these cases have been resolved during consultations, either because of bilateral settlement or because a ruling has been issued in a related case, but settlement was never notified to the WTO Secretariat. Specifically, by examining all pending cases of the first ten years of WTO dispute settlement, Davey (2005) finds that 35 percent of cases had in fact settled through mutually agreed solutions. In an additional 21 percent, the complaint was withdrawn because the contested measure was terminated or legal, political, or commercial interests had changed.

Davey’s investigation reinforces our argumentation that the overall performance of the consultation process must be considered more successful than would be indicated by the formal record. The DSM’s outcome, thus, appears to be much better than one would expect from simply looking at the overview of WTO disputes, which lists approximately one-third of all consultation requests prior to January 1st, 2010, as pending. In order to test this, we go

²³ Under pending cases we include the following: (1) panel report under appeal (see cases DS400 and DS401); (2) compliance proceedings ongoing (see cases DS316, DS352, DS381, DS384, DS386, and DS391).

²⁴ Under inactive cases we include the following: (1) DS38, DS77, DS88, DS95, DS282, DS336, DS352, DS355, and DS356; (2) DS9, DS164, DS188, DS195, DS214, DS260, DS270, DS280, DS357, DS365, DS369, and DS389.

beyond the convention by actively reviewing the literature, as well as, the websites of foreign, trade and economic ministries in order to obtain information on unreported, resolved cases.

TABLE 2: Statistical overview of settlement patterns at the WTO: 1995 - 2009

Status of Disputes	Disputes Initiated		
	1995 - 1999	2000 - 2004	2005 - 2009
Cases in progress	16	12	12
Before panels or the Appellate Body	0	1	7
	(0%)	(1%)	(11%)
In consultations	16	9	4
Inactive cases	0	2	1
Panel or Appellate Body report adopted	83	68	32
	(56%)	(56%)	(48%)
Notified to the WTO	75	66	32
Resolved via ruling in related case ¹	8	2	0
Early settlement	66	52	27
	(44%)	(43%)	(41%)
Notified to the WTO	39	25	13
Officially in consultations ²	24	25	10
Officially inactive ³	2	2	3
Panel ruling, but measure revoked during panel deliberations ⁴	1	0	1
Resolved via ruling in other forum⁵	5	3	0

Note: The figures in parentheses reflect the row's percent of the total resolved cases.

EXPLANATORY NOTES

¹ This category encompasses all disputes that are officially in consultations or in active, but that have been resolved via a ruling in a related case involving a different complainant.

² This category encompasses all disputes that are officially in consultations, but that have been resolved bilaterally without settlement being notified to the WTO.

³ This category encompasses all disputes that are officially inactive, but that have been resolved bilaterally without settlement being notified to the WTO.

⁴ This category encompasses all disputes in which a ruling was issued, but where the contested measure was terminated during panel deliberations

⁵ This category encompasses all disputes that have been resolved via a ruling by NAFTA, the ICJ or a domestic court. DS159 is also included in this category, whereby the disputed measure was removed when the defendant acceded to the EU in 2004. All these disputes are officially in consultations or in active.

As the data in Table 2 shows, there is a relatively large gray area of resolved disputes among the cases currently recoded as inactive or pending in consultations. In a considerable amount of cases, settlement has been resolved but never formally notified to the WTO. After some investigation, we found that 76 of 116 pending cases in our dataset are actually resolved, either via early settlement (66 cases) or via a ruling in a related case (ten cases) (see Appendix A). Moreover, in two cases classified by the WTO as resolved via panel ruling, the measure at issue had been withdrawn before the panel concluded its substantive work.²⁵ Based on the

²⁵ DS33, DS391

figures present in the table above, we find that 336 of the 376 disputes initiated prior to January 1st, 2010 have actually been resolved (see Appendix B). 145 cases settled early, while 191 cases were resolved via a ruling by the Appellate Body and/or panel. Of the remaining 40 cases, eight are before active panels, while 32 disputes continue to linger in consultations or before inactive panels. The resulting dataset is, thus, to the best of our knowledge, the most complete in terms of disputes covered and concessions coded.

Importantly, Table 2 indicates that the probability of settlement is not evenly distributed across the events leading up to a panel ruling. In particular, of the 145 early settlement cases, 107 settled during consultations.²⁶ A further 23 disputes were resolved bilaterally after a panel had been established, while nine disputes settled before inactive panels. Only three cases settled after the panel had concluded its substantive work, but before the ruling was issued.

TABLE 3: Statistical overview of dispute outcomes at the WTO: 1995 - 2009

Status of Disputes	Level of Concessions		
	Zero	Partial	Full
Early settlement	2	21	109
Panel not established	0	16	79
Panel inactive ¹	0	3	5
Panel established, no ruling	2	2	22
Panel concluded substantive work, no ruling	0	0	3
Panel or Appellate Body report adopted	11	57	99

EXPLANATORY NOTES

¹ This category encompasses all cases where panelists have not been chosen or the panel proceedings were suspended under Article 12.12 of the DSU, and not resumed after 12 months. It does not include reports resulting from proceedings pursuant to Article 21.5 of the DSU.

As Table 3 further shows, concessions by the defendant appear significantly more likely to occur during early settlement than after a panel ruling. Of the 191 cases in which an Appellate Body and/ or panel ruling had been issued, 13 have been ruled in favor of the defendant, thus, not requiring any further legislative action. Since eight disputes remain before active panels, concessions have been made in 170 cases. In the remaining 170 cases, in which there is a clear ruling against the defendant, we can see that they are more prone to make zero and partial concessions. Moreover, defendants seem to be particularly prone to make full

²⁶ See Appendix B for a complete list of codings. Regrettably, concessions could not be coded for a small number of cases due to lack of reporting.

concessions during consultations, prior to the establishment of a panel.

Besides simply highlighting the importance of pre-ruling settlement for the institution, these findings raise an intriguing question. The WTO does not possess centralized enforcement power, the upshot being that both have relied on the complainant itself to implement any retaliatory measures that may be authorized. The evidence here indicates, however, that defendants nonetheless seek to avoid an adverse ruling by settling early. The answer cannot simply be that it is the threat of retaliation by the complainant that prompts early settlement, since this threat is insufficient to induce full compliance in the majority of cases (109 of 145). Hence, in order to explain early settlement in WTO disputes, we must look elsewhere.

2. The Disputants

Analyzing WTO disputants is of interest, as it sheds light on whether legalization of the multilateral trade institution has contributed to equalizing power dynamics between developing and developed countries. In this section, we provide a brief descriptive summary regarding participation of the disputing parties. In total, we have a count of 47 different disputants from five different geographical regions,²⁷ including: Africa, the Americas, Asia, Europe and Oceania. Of these disputants, we find that the US and EC have the highest participation counts totaling 165 (25 percent) and 121 (18 percent), respectively. For the full list of the disputants, their geographical and development classifications, and their participation rates, please refer to Table 6.

We classified each member into five separate groups based on Henrik Horn and Petros Mavroidis (2011): G2, industrialized countries (IND), developing countries (DEV), and least developed countries (LDC). The G2 group consists of the EC and US. IND countries include those that are member of the OECD and also non-OECD members, but have very high per capita income (e.g. Hong Kong, China and Singapore). The DEV category contains countries that do not fit within the aforementioned groups, but also not within the LDC category, which is based a list compiled by the United Nations.²⁸ Lastly, the BIC countries are Brazil, India and China. Following Horn and Mavroidis' (2011), we have chosen to separate the three into their own group, considering their frequency as disputants.

To analyze how each member group participates in the WTO dispute settlement system, we separate participation into two categories: complainant and defendant. Thus, we

²⁷ Based on the United Nations geoscheme, which classifies countries into regions and sub regions

²⁸ List of LDCs, 2014, www.un.org/en/development/desa/policy/cdp/ldc/ldc_list.pdf

can see the exact number of times each group has acted as a complainant or defendant from 1995-2009 (as listed below).

TABLE 4: Statistical overview of participation in consultation stage: 1995 - 2009

Country Classification	Participation					
	Complainant	%	Defendant	%	Total	%
G2	127	38%	159	47%	286	43%
IND	96	29%	78	23%	174	26%
DEV	70	21%	54	16%	124	18%
BIC	42	13%	45	13%	87	13%
LDC	1	0%	0	0%	1	0%
Total	336	100%	336	100%	672	100%

Table 4 shows that the G2 group has the highest participation rate, accounting for 43 percent of all disputes. Specifically, the G2 countries complained a total of 127 times and acted as defendants in 159 cases, totaling 286 disputes. IND countries come in (at a far) second, with a participation rate of 26 percent. They were complainants in 96 cases and defendants in 78, totaling 174 disputes. Additionally, DEV countries come in third with 18 percent (124 total disputes), as they were complainants in 70 cases and defendants in 54. It is worth noting that the DEV group would have actually come in second, if the BIC countries were included (as they are usually categorized as DEV), narrowing the gap between the G2 and second highest group. The BIC group's participation rate is 13 percent, as they complained 42 times and defended 45 times. Lastly, the LDC group (which only includes one country: Bangladesh) has a participation count of one, where the country complained against a BIC country.

TABLE 5: Distribution of bilateral complaints across complainant and defendant groups

Complainant	Defendant					Total
	G2	IND	DEV	BIC	LDC	
G2	40 (31%)	42 (33%)	17 (13%)	28 (22%)	0 (0%)	127 (100%)
IND	54 (56%)	22 (23%)	9 (9%)	11 (11%)	0 (0%)	96 (100%)
DEV	32 (46%)	9 (13%)	25 (36%)	4 (6%)	0 (0%)	70 (100%)
BIC	33 (79%)	5 (12%)	3 (7%)	1 (2%)	0 (0%)	42 (100%)
LDC	0 (0%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)	1 (100%)

Table 5 illustrates the distribution of complaints across the different groups. The most targeted group is G2, as 56 percent of all IND complaints, 46 percent of all DEV complaints,

and 79 percent of all BIC complaints are filed against G2 members. The G2's most targeted group is IND (33 percent), which is followed closely by the G2 countries (31 percent) filing complaints against each other. We can also see that there is relatively little interaction among IND and DEV countries, with only 9 percent of IND complaints filed against DEV countries and 13 percent of DEV complaints against IND countries.

In essence, the table above arguably attests that the transformation of the dispute settlement system from the previous "power-oriented" to a "rules-oriented" system (Jackson 1997) has helped to equalize some power dynamics. This is evidenced, as we can see that IND, DEV, and BIC countries main targets are two of the more powerful WTO members: the EC and US. The extent to which the WTO DS system has equalized such dynamics, however, is debatable and will be addressed later on in our Results and Implications sections.

TABLE 6: Disputant Overview

Members	Complainant	Defendant	Total	Classification
Argentina (Southern America)	11	11	22	DEV
Australia (Oceania)	7	6	13	IND
Antigua and Barbuda (Caribbean)	1	0	1	DEV
Bangladesh (Southern Asia)	1	0	1	LDC
Brazil (Southern America)	21	13	34	BIC
Canada (Northern America)	24	13	37	IND
Chile (Southern America)	10	10	20	DEV
China (Eastern Asia)	6	17	23	BIC
Chinese Taipei (Eastern Asia)	2	0	2	DEV
China, Hong Kong (Eastern Asia)	1	0	1	IND
Colombia (Southern America)	2	3	5	DEV
Costa Rica (Central America)	2	0	2	DEV
Croatia (Southern Europe)	0	1	1	IND
Czech Republic (Eastern Europe)	0	1	1	IND
Dominican Republic (Caribbean)	0	1	1	DEV
Ecuador (Southern America)	3	2	5	DEV
Egypt (Northern Africa)	0	4	4	DEV
European Community (Europe)	60	61	121	G2
Guatemala (Central America)	5	1	6	DEV
Honduras (Central America)	2	0	2	DEV
Hungary (Eastern Europe)	5	6	11	IND
India (Southern Asia)	15	16	31	BIC
Indonesia (South Eastern Asia)	4	3	7	DEV
Japan (Eastern Asia)	11	13	24	IND
Korea, Republic of (Eastern Asia)	13	13	26	IND
Malaysia (South Eastern Asia)	1	1	2	DEV
Mexico (Northern America)	16	12	28	IND
New Zealand (Oceania)	7	0	7	IND
Norway (Western Europe)	4	0	4	IND
Nicaragua (Central America)	1	0	1	DEV
Pakistan (Southern Asia)	3	1	4	DEV
Panama (Central America)	3	1	4	DEV
Peru (Southern America)	2	4	6	DEV
Philippines (South Eastern Asia)	3	4	7	DEV
Poland (Eastern Europe)	2	1	3	IND
Romania (Eastern Europe)	0	2	2	IND
Slovak Republic (Eastern Europe)	0	3	3	IND
Singapore (South Eastern Asia)	1	0	1	IND
South Africa (Southern Africa)	0	2	2	DEV
Sri Lanka (Southern Asia)	1	0	1	DEV
Switzerland (Western Europe)	4	0	4	IND
Thailand (South Eastern Asia)	11	2	13	DEV
Trinidad and Tobago (Caribbean)	0	1	1	DEV
Turkey (Western Asia)	2	7	9	IND
United States (Northern America)	67	98	165	G2
Uruguay (Southern America)	1	1	2	DEV
Venezuela (Southern America)	1	1	2	DEV

3. The Trade Agreements

We identified a total of 242 agreements that were in force during our observation period for which at least one disputant was a signatory to. Regrettably, nine agreements were omitted from our dataset, as DESTA does not have coding on their depth (see Appendix C). Thus, we included 233 trade agreements into our original dataset that included concrete steps towards the preferential liberalization of trade in goods and/or services (see Appendix D). We do not we do no treat accession agreements or services agreements that are signed in addition to goods agreements, as separate trade accords.

The number of trade agreements that we discover is substantially larger than the number of agreements covered by comparable datasets. The list maintained by the WTO includes 137 of our 233 agreements. The additional 96 agreements that we found were either not notified to the WTO or are not listed as the agreements are no longer enforced (e.g. all of the former non-EC countries, such as Hungary and Poland, agreements before they joined the EC are not listed), and thus, have not made it into many of the datasets on trade agreements that are based on the WTO's inventory. We identified the remaining agreements by searching the lists maintained by the World Bank's Global Preferential Trade Agreements Database (Tuck Trade Agreements Database) and via systematic searches of the web pages from foreign ministries and other governmental institutions.

After cross-checking the World Bank's compilation with that of the WTO, we find a high number of missing observations, as well as, mistakes in the World Bank data regarding enforcement date and agreement status. To ensure the accuracy and reliability of our data, we verify their coding with the information provided by foreign ministries and other governmental institutions. The coding has been carried out by two independent coders.

Our dataset confirms the commonly held view that countries have multiplied their efforts to sign and ratify trade accords. The large majority of agreements (129 pacts, 55 percentage) came into force since the turn of the millennium. 85 agreements were enforced in the 1990s, seven in the 1980s, ten in the 1970s, and only two in the 1960s. The surge of new agreements signed in the 1990s was particularly related to the efforts of the EU and EFTA states to stabilize relations with new European democracies after the end of the Cold War. Competition for market access stimulated other countries to act accordingly, with many of the more recent agreements being concluded among emerging and developing countries (Dür et al. 2014). Consequently, while the EU and US are still the top signatories of PTAs, all disputants in our dataset are not signatories to various agreements outside of the WTO.

In terms of actor constellation, large majority of preferential trade agreements (PTAs)

that are signed are bilateral agreements (128 agreements). 157 of the 233 agreements remain in force, while 76 accords expired prior to January 1st, 2010. It should be noted, however, that 75 of these PTAs expired because their signatories acceded to CEFTA or became EU members. Rather than indicating a propensity towards less integration, this demonstrates a distinct move toward regionalism and the deepening of trading relationships.

Importantly, our data is indicative of a distinct trend that has emerged in the organization of international trade towards increasing the scope of liberalization efforts. The depth of trade accords has increased significantly over the last two decades. In fact, all but one of the nine agreements that receive the maximum score of seven on DESTA's additive index all have been signed since 2000.

A glance over the landscape of these institutions suggests that trade accords clearly exhibit major differences in terms of governance structure, overall ambitions and commitments reflected in the depth of trade concessions. Following the index scores from DESTA, 202 of our 233 analyzed trade agreements foresee a complete tariff reduction. 207 agreements provide for a substantive provision on standards, 95 accords include services, 69 agreements account for competition, 66 PTAs liberalize investment, 52 incorporate provisions on public procurement, and 45 accords capture cooperation on intellectual property rights.

Interestingly, substantial variation persists in the depth of agreements signed by a disputant. Taking the EU as an example, the EU has signed a total of 37 of the 233 identified trade agreements with its integration efforts ranging from zero to seven according to the DESTA coding.

V. THEORY

In this section, we lay out the theoretical premise for our argument. Our main contribution lies in providing a nuanced analytical framework highlighting the role of institutional embeddedness and reputational sanctions in the context of the WTO's DSM. We contend that the degree to which defendants' are embedded in external trade agreements acts as an important determinant of dispute escalation at the WTO. However, contrary to the institutionalist literature, we contend that reputational concerns elicit early settlement from defendants that are less integrated in the trade realm. Specifically, we argue that for respondents that have strong incentives for further liberalization (because they are signatories of only a few and/or shallow agreements) the "shadow of the future" (Norman and Trachtman 2008) highlights reputational concerns. The argument is developed in two steps:

1. Define institutional embeddedness
2. Theorize the impact institutional embeddedness exerts on defendants' compliance calculus during WTO adjudication

1. Institutional Complexity in International Trade

Global coordination problems cannot be managed in the absence of institutional structures that establish standards for acceptable state conduct and monitor compliance. In order to deal with the complexities of the international system, almost all states participate in a variety of international institutions. Cheryl Shanks et al. (1996) discover that, in 1992, all but two countries (Chinese Taipei and Liechtenstein) were party to at least 100 Intergovernmental Organizations (even North Korea was party to 100). The study, however, was limited to agreements that contained intergovernmental bodies with permanent staff. To provide a clearer picture of the vast and intricate nexus of international institutions, one has to only look at the escalating number of International Organizations. In 2000, there were 6,743 IGOs (Held and McGrew 2000)²⁹ and 47,098 International Nongovernmental Organizations in force (Union of International Associations, 2001). Now, just over decade later, the Union of International Associations (2014)³⁰ list a total of over 65,000 IOs in force (active and inactive), illustrating the proliferation of institutional network states' are embedded in.

As noted by Karen Alter and Sophie Meunier (2009), this trend has resulted in the upsurge of "international regime complexity," in which considerable overlap across

²⁹ The authors note however, that this number should be treated with caution, as it includes both active and inactive organizations.

³⁰ Union of International Associations (2014). <http://www.uia.org/>

agreements contributes to conflicting international commitments. This makes an already convoluted environment even less transparent, as no institution functions in isolation, but is embedded in a large nexus of (partially) overlapping agreements. The problem is exacerbated by the lack of hierarchy in the international system, with uncertainty regarding where authority over an issue resides.

The phenomenon of institutional complexity is particularly relevant in the trading regime. At the center is the WTO, which boasts global participation of 160 formal members and 24 observer governments. Coexisting with the multilateral trade institution is a myriad of bilateral and regional trade agreements (RTAs) (permitted by GATT Article XXIV (Enabling Clause) and GATS Article V). Among advanced and developing countries alike, the proliferation of trade agreements has been a persistent feature of the world economy in recent decades. The sheer and ever increasing number of cooperative endeavors has resulted in a dense and intricate institutional environment. As of 2014, the WTO lists 585 RTA notifications, with 379 of the noted RTAs currently in force. Moreover, all but one WTO member (Mongolia) are now party to at least one RTA.

The parallel process of participating in the multilateral trade system, drafting regional trade associations, and concluding bilateral reductions in trade barriers has given rise to an economic system of interdependence unprecedented in terms of scope and intensity. Creating a system regulated by a multitude of agreements with overlapping membership arguably pits regionalism against multilateralism, bringing up the obvious question of whether this trend undermines or facilitates the hegemony of the WTO. A substantial amount of studies, both quantitative and qualitative, have hence emerged, focusing on whether regional agreements are “building” or “stumbling blocks” (Bhagwati 1991) to multilateral trade liberalization (Shanks et al. 1996). Whether regional agreements hinder the WTO objectives continues to remain among the most contested issues in both theoretical and empirical scholarship.

At first glance, the Enabling Clause seems to sabotage a cornerstone of the WTO and the multilateral trading system: the Most Favoured Nation (MFN) (principle (enshrined in GATT Article I and GATS Article II). Considering the rise of regional agreements in light of the stagnating Doha Round, this is especially disconcerting, particularly if one is in the view that “states’ initial motivation for establishing external agreements is to create credible exit options to generate leverage in the multilateral regime” (Karreth 2009, p. 7).

Despite obvious conflicting objectives and studies to support the stumbling block theory,³¹ the reality is not as bleak and others have found regional agreements to complement and promote multilateral trade.³² Notably, Richard Baldwin's (2005) domino theory of regionalism suggests that the establishment of a regional agreement increases the incentives for outsiders (specifically, those of nonmember exporters) to join.³³ This leads to increasing membership and consequently, the expansion of the agreement until it reaches multilateral participation. This effect, however, is contingent upon whether the industrial output of the export sectors is greater than the output of import competing sectors, which is likely to be the case, as export sectors produce for both domestic and foreign consumers (Baldwin 2009).

Along a similar line of argumentation, Robert Baldwin and Frédéric Robert-Nicoud (2008) propose the "juggernaut effect." They contend that once a country joins a trade agreement, its pro-liberalization constituency enlarges and its domestic political economy forces are realigned. Accordingly, members will find it politically optimal to reduce tariffs in every subsequent round of trade negotiation. Essentially, the theory highlights the importance of the reciprocity principle via mutual and ongoing trade negotiations, heralding the claim "liberalization begets liberalization" (Baldwin 2009, p. 48), which seems to be the WTO's guiding rationale for the Enabling Clause.

Despite the growing number of trade agreements, there is limited empirical scholarship concerning the interaction of these institutions, and even less exists that attempts to tie empirical results into a reasonably coherent framework. Trade policy is a rich area for research on overlapping institutions given the large number of agreements regulating trade. While isolated trade accords have been studied extensively, both in terms of their formation and their ability to influence international political outcomes, no major studies have yet investigated if and to what extent the strategic behavior of parties to trade agreements may be influenced by their wider involvement in the international trading system. In light of the fact the integrative process is continuing unabatedly, it is important to systematically analyze how embeddedness in the international trade milieu affects cooperation.

In this, we recognize the need to account for institutional variation and diverse levels of integration when estimating agreements' effects. However, there exists relatively little scholarship accounting for the effect institutional variation, both in terms of design and scope,

³¹ See generally Freund 2000; Goto and Hamada 1997; Goto and Hamada 1999; Krishna 1998; Levy 1997; Limao 2007; Nordstrom 1995; Reizman 1985.

³² See generally Baldwin 2005; Baldwin and Robert-Nicoud (2008); Frankel and Wei 1995; Summers 1991.

³³ Critics have argued however, that this theory ignores the „supply side“ membership.

exerts on cooperation.³⁴ With the recent exception of DESTA, previous studies were limited to the NAFTA and the EU (Estevadeordal et al. 2009). Given the growing evidence on the significance of institutional disparity for their ability of organizations to oversee economic, social, and political matters, a framework to account for institutional variation in a systematic manner is required (Dür et al. 2014).

This study intends to combine these two emerging strands of research. Specifically, we seek to systematically investigate the potential effects of being party to multiple integration initiatives on state conduct within one institution in particular: the WTO. Building on the institutionalist literature interested in the effects of increasing integration, we suggest that the degree to which defendants are embedded in external trade institutions affects their strategic behavior during dispute adjudication. However, contrary to the prevailing view, we contend that states that are signatories to a few, shallow trade agreements should be especially sensitive to reputational sanctions, as they have a lot to gain from further liberalization. Our theory stands up to empirical scrutiny against a sizeable set of more than 230 trade agreements.

2. Institutional Embeddedness

While embeddedness in the trade realm has only been applied as an explanatory variable for member state behavior in the WTO in a very limited number of studies, empirical scholarship has for some time analyzed how the GATT/WTO interacts with overlapping trade institutions. Edward Mansfield and Eric Reinhardt (2003, p. 830) find that the GATT/WTO played a significant role in stimulating the growth of PTAs, as doing so improved members' leverage in multilateral negotiations by "furnishing states with insurance against the emergence of conditions within the GATT/WTO that could threaten their economic interests." Conversely, Arvind Subramanian and Shang-Jin Wei (2007) find that if two states establish a trade agreement that supersedes the GATT/WTO, the effect of the latter may be minimal.

In the context of trade disputes, most scholarship considers only the GATT/WTO DSM in isolation. Only recently have empirical as well as theoretical studies begun to broaden their focus to comprehensively investigate the effects of institutional diversity on dispute settlement. Christina Davis (2009) examines the influence of overlapping institutions and international regime complexity within trade. In particular, she argues that the nexus of

³⁴ Regionalism: friends or rivals?, Understanding the WTO, http://www.wto.org/english/thewto_e/whatis_e/tif_e/bey1_e.htm

existing trade agreements effects trade politics in three ways: selection of venue (forum shopping), liberalization of commitments, and enforcement of compliance. To elaborate, Davis argues that trade regime complexity and overlapping membership increases the likelihood of forum shopping. Specifically, she identifies two selection dynamics: actors push the most contentious topics into the negotiation rounds of the WTO, while noncontroversial issues are settled via bilateral or regional venues. This then, leads to obstacles for multilateral trade liberalization, as it narrows and pushes interest group lobbying to the WTO forum, which in turn impedes negotiations. Additionally, Davis notes that institutional variation with regard to dispute settlement increases the likelihood of legal uncertainty via contradictory rulings, thereby undermining adjudication's compliance-pull.

However, related to our argument, she acknowledges that international regime complexity can also promote compliance by increasing the incentives to maintain a favorable reputation, especially when reputation effects "ripple across regimes." Davis' work ranks among the few studies explicitly emphasizing that decisions made at every stage of a trade negotiation must account for related institutions. Important for the context of this study, she acknowledges that overlapping institutions in the trade realm may increase the enforcement power of the WTO's dispute settlement via its function in disseminating information about reputation to the broader membership.

The general concept of institutional embeddedness is used in social sciences to depict dependence of one institutional environment or actors on another (Heydebrand 2009). This concept was first introduced within the area of international trade by Judith Goldstein et al. (2007). They argue that an institutions' effect is reliant upon the network it is embedded in. Thus, it is important to analyze the precise form of interaction between institutions within the same environment (whether they are mutually reinforcing, redundant or have differing objectives) to fully understand the effects a specific institutions exerts on member behavior (in their case, the GATT/WTO). Additionally, Johannes Karreth (2009) investigates the influence of external RTA membership, which he coins as "institutional environments," on concession-making in GATT/WTO disputes. Specifically, he contends that shared membership to related trade institutions act as additional constraints, increasing the cost of antagonistic behavior for defendants. Karreth argues that because RTAs "embody a degree of sunk costs," they provide "noteworthy leverage" for deviant members to comply via a reputational spillover mechanism. Most recently, Mark Copelovitch and David Ohls (2012) contend that external trade agreements help to explain the discrepancy in the timing of WTO accession decisions following states' independence from its colonial rule.

Building on this budding literature, we systematically investigate whether “embeddedness to commercial relations” (Goldstein et al. 2007 p. 39) affects defendant behavior during dispute adjudication in the multilateral trading regime. At a time when trade agreements are increasing in visibility, it is important that the effect institutions exert on WTO disputes is analyzed in order to understand the value of the WTO dispute settlement system in a regionalized world. However, contrary to what existing studies suggest, we argue that reputational concerns are especially pronounced for states that are less integrated in the trade realm. Moreover, different to existing scholarship, this study employs all reciprocal trade agreements (bilateral and regional) and explicitly accounts for variation across agreements in terms of institutional design.

3. Weak vs. Strong Ties

This study seeks to explain the puzzling rate of early settlement observed during WTO adjudication. Considering that the WTO’s remedial regime undermines the system’s deterrent effect, we conjecture that an adverse ruling is politically rather than economically costly (Busch and Reinhardt 2000). In light of the substantial rate of pro-plaintiff rulings issued (consistently 80 to 90 percent), it is argued that adjudication exercises a deterrent effect, despite the absence of coercive enforcement, disseminating information on state conduct and, thereby, unleashing reputational pressures. The “shadow of the law,” in the form of looming legal condemnation, serves as an explanation toward observed patterns of early settlement (Busch and Reinhardt 2000).

Following existing scholarship, it is argued that WTO dispute settlement gains enforcement power via a reputational spillover mechanism. An adverse ruling by a panel widely broadcasts to the international audience that the defendant has defected on the agreed-on terms of its multilateral trade obligations. States with reputations for being an unreliable treaty partner will not be able to credibly commit to future cooperative endeavors, as observing parties will discount the expected value of agreements with such a state. A state that is called out by a panel for violating reneging on its trading commitments could be given worse terms in future bilateral trade agreements, or it might it might be unable to find any partner willing to negotiate a new economic partnership (Davis 2009).

While we acknowledge that the functioning of reputation remains among the most contested and intriguing issues in IL and IR scholarship, a consensus seems to have emerged that states are, needed, concerned with their reputational standing. Even critics of reputational

theories in political science (Mercer 1996, pp. 19-25) and IL skeptics (Goldsmith and Posner 2005 p. 104) concede as much. Importantly, the functioning of a reputational spillover mechanism in the trade realm is supported by case-study evidence on negotiations towards PTA formation and WTO accession. For example, negotiations among Japan and China have been hampered by concerns that China's poor compliance with the TRIPS agreement signals its lack of commitment to the agreed-on terms of its trade agreements (Davis 2009). Similarly, Russia's willingness to defect on intellectual property provisions in its bilateral agreements has been cited as a factor complicating its ability to accede to the WTO (Lane 2013). However, evidence other than illustrative examples is rare and only very few studies have attempted to apply reputation as a quantifiable variable (Dreher and Voigt 2011; Tomz 2007; Walter 2009).

Building on the emerging stream of literature interested in the interaction between overlapping institutions, we conjecture that the extent to which reputational concerns are able to elicit early settlement is contingent on the degree to which the defendant to a dispute is embedded in the wider trade realm. However, deviating from the institutionalist view, we contend that the fear of reputational spillovers exerts impetus for settlement in disputes involving defendants that are signatories of a few, less integrated external trade agreements. Drawing on the law and economics perspective that international agreements are unfinished, long-term contracts, it is hypothesized that the "shadow of the future" (Norman and Trachtman 2008), in the form of ongoing trade negotiations, should heighten the sensitivity to reputational sanctions for states with a strong goal for further trade liberalization. States that have a lot to lose from being excluded from future integration initiatives send a costly signal by settling early, thereby, making their desirability as a cooperative partner more credible.

The evolution of the international trading system since World War II clearly has been toward increasing openness in line with the original intentions of the GATT founders since 1947. The proliferation of trade integration has characterized the organization of international trade among advanced and developing WTO members alike, supporting the claim that "liberalization begets liberalization" (Baldwin 2009, p. 48). New agreements are signed, existing accords are enlarged, RTAs are geographically extended, and a distinct move towards greater depth of integration as well as greater legalism in the enforcement of trade agreements is increasingly witnessed. Within the category of trade agreements, there are important differences as to the provisions that provide for new or increased market access. Specifically, integration initiatives now go beyond traditional tariff-cut exercises and may include such policy areas as services trade, investment, intellectual property, technical barriers to trade and

dispute settlement. Broadening the sectoral scope of liberalization to cover not only tariff cuts is a crucial instrument for enhancing the impact of agreements. For instance, about one third of agreements in force today contain services commitments compared to less than a tenth in 1990 (WTO 2011). The value of trade between members of PTAs is thus growing continuously, exacerbated by the ten years of ongoing deadlock in the Doha Round. Creating new and deepening existing PTAs becomes particularly attractive when one considers that signatories are able to receive discriminatory tariff treatments that need not be granted on an MFN basis (permitted by GATT Article XXIV and GATS Article V).

The proliferation of new economic partnerships, as well as the tendency toward deepening and broadening existing ties, exacerbates the occasions at which a state might be penalized for non-cooperation. States' environment of trade agreements thus affects dispute outcomes in the WTO by extension. Defendants with a high potential to expand trade ties and market access in the future will take into consideration the need to maintain a favorable bargaining position in reciprocal trade negotiations. The effects of an adverse ruling on reputation are largely anticipated during consultations, acting as a stimulus for early settlement for defendants with the goal of concluding future liberalization commitments. States that have a lot to lose from being excluded from future integration initiatives send a costly signal by settling early, thereby making their desirability as a cooperative partner more credible. For those defendants that are already deeply embedded in the trading realm and thus enjoy extensive market access, the marginal value of joining new agreements and/or expanding existing ones diminishes. Where the proposed level of integration is shallow, future cooperation should be more valuable than where integration already is extensive.

An appreciation for a reputation-based enforcement mechanism in the trading regime becomes particularly pronounced when one considers that the WTO is different from other international agreements, in that it cannot be invoked by mere acceptance, nor can it simply renounce its obligations. As Pauwelyn (2000) rightly observes, there is an extra "entry fee" in to balance future concessions granted by existing WTO members. Therefore, the basis of the relationship between member states relies on a "delicately negotiated balance not only of rights and obligations explicitly enshrined in WTO agreements but also of trade concessions exchanged at entrance and through a series of subsequent trade rounds."

To check the validity of our claim, we test whether the degree to which defendants' are embedded in external trade agreements determines their strategic behavior during dispute adjudication at the WTO. If our argument is correct, then the broader context of (overlapping) trade institutions influences critical variables such as bargaining power and the force of

reputational sanctions. The effect of the “shadow of the future” and thereby reputational concerns should diminish for defendants that are deeply integrated into the trade realm, as the value of additional market access declines. Contrary to what the institutionalist literature suggests, this should manifest itself in the finding that early settlement is more pronounced among defendants that are less integrated in the international trade realm. Legal condemnation stemming from an adverse panel ruling would caution existing institutional partners as well as observing parties, which will be costly for states that wish to liberalize further.

VI. EMPIRICAL ANALYSIS AND RESULTS

1. Control Variables

Research on GATT/WTO dispute settlement has centered on explaining the initiation of disputes, the choice of institutional mechanisms for conflict resolution, and addressing the effects of increased legalization. However, there are only very few empirical studies that explicitly aim at unravelling patterns of dispute outcomes. To specify, dispute outcome, in this context, is defined as the ultimate policy result of a dispute, not as the nature of a ruling per se, and has been conceptualized either in terms of concessions by the defendant (Busch and Reinhardt 2003) or dispute escalation (Guzman and Simmons 2002; Sattler et al. 2013).

We build on this scholarship to identify the relevant control variables for our study (see Appendix D for a complete list of the relevant variables, as well as their sources). After having reviewed the relevant literature, we find that empirical studies on WTO dispute outcomes have focused on either characteristics of the disputants – economic pressures and political institutions of the disputants – or case specific variables, as the driving mechanisms explaining observed escalation dynamics at the WTO. The indicators capturing disputants' characteristics were recorded for the year the request for consultation was filed. Importantly, we control for all of the dependent variables for dispute escalation that exists in the literature.

1.1 Disputant Characteristics

1.1.1 Economic Pressures

The capability of resorting to adjudication may depend on the economic power of the disputing parties. We recognize that market power is inherently related and, thus, include the difference in GDP (in constant 2005 US dollars) between the two disputing parties (following Guzman and Simmons 2002; Busch and Reinhardt 2003; Sattler et al. 2013). It is argued that even with increased legalization, power-relationships remain an important element of rule enforcement in the WTO (Bown 2005). Relative market size translates into bilateral retaliatory capacity, implying that complainants with substantial economic leverage over the defendant should be more able to employ credible retaliatory threats. Conversely, complainants with small economies may lack the leverage to effectively impose countermeasures against defendants with large markets. Thus, disputants with fairly symmetrical economic power should be more likely to resort to litigation, as neither side is able to coerce settlement.

Following Busch and Reinhardt (2003), we are also interested in seeing whether disputants' income has any bearing on the propensity of settlement and concession-making. According to their argument, there is an increasing divide between rich and poor member states regarding their performance during dispute settlement. They observe that developing countries are less prone to early settlement, and attribute this to a lack of legal capacity. To capture the disputant's level of development, their GDP per capita (in constant 2005 US dollars) was recorded. To compliment this, we include the population size for both the complainant and defendant to see if the size of a disputant has any effect. However, a different strand of literature points to the issue of power dynamics during dispute settlement, arguing that poorer countries lack the resources to effectively adjudicate a dispute. Moreover, the argument goes that poorer countries are generally more dependent on foreign market access, which reduces their bargaining power, making them more likely to concede in order not to jeopardize such access.

We also use an indicator of economic power that more explicitly dives into the bilateral trading relationship between the disputing parties. Specifically, we control for the asymmetry of trade dependence between the parties to the dispute (Guzman and Simmons 2002). If the logic of asymmetrical power relations holds, then a relatively high degree of dependence on access to the opposing parties' domestic market should reduce a state's bargaining leverage, making it is more likely to concede in order to circumvent jeopardizing such access. Specifically, the greater the difference between the complainant's export dependence on the defendant (relative to the complainant's GDP) and the defendant's export dependence on the complainant (relative to the complaint's GDP), the more likely the relatively more dependent disputant is to concede, and the smaller the chances of dispute escalation. For the EU, the total value of the exports was added together.

1.1.2 Domestic Political Institutions

Following the existing literature, we collect several variables to capture the political institutions of the disputants. Two kinds of constraints – the nature of the governmental system and the regime type – have been noted as particularly relevant in influencing settlement dynamics. Building on work by Guzman and Simmons (2002), we hypothesize that whether a government is parliamentary or presidential determines the degree of constraint on the negotiator to concede in trade disputes (normally party to a government's executive branch). In presidential systems, they argue that executives are particularly accountable to a domestic legislature with the authority to veto settlement. Accordingly, a ruling by an

adjudicative third party might be an attractive alternative to settlement for governments subject to potential legislative obstruction. Since parliamentary governments are not prone to the same degree of independent legislative input into trade policy, cases involving disputants with parliamentary governments should be easier to settle.

We acknowledge that by coding regime pairs as a simple dummy variable we overlook variation existing between disputing pairs. Thus, in an additional robustness check (Model 3), we control for all four possible regime combinations between disputants (whether the disputing pair involved a complainant and a defendant with a parliamentary government, a complainant and defendant with a presidential government, a complainant with a presidential government versus a defendant with a parliamentary government, or a complainant with a parliamentary government versus a defendant with a presidential government).

The distinction between parliamentary and presidential regimes is well accepted in the political science literature and a variety of established datasets contain indicators that distinguish the two. We rely on the data provided by José Antonio Cheibub et al. (2010), as updated through 2011 by Nils-Christian Bormann and Matt Golder (2013). Since these datasets also include a coding for semi-presidential systems, we refer to Thorsten Beck et al. (2001) for these particular states. In regards to the EU, complications arose concerning how it should be classified, as neither of these authors attempt to do so. Thus, following Guzman and Simmons (2002), we have decided to categorize the EU as “presidential.” According to their argument, the constraints on the Commission by the Council of Ministers and member states are significantly more extensive than the hurdles to which parliamentary regimes subject their negotiator.

As argued elsewhere, the decision to escalate might also be affected by whether the disputants are democratic or non-democratic. However, due multicollinearity, we cannot include for a dichotomous distinction in our model. To account for the possible effect of democracy on dispute escalation, in a later specification (Model 2) we include the degree of democratic governance of the disputants. In the estimate we use the combined polity score of the disputants (Marshall and Jaggers 2009), referring to the measure of democracy introduced by the Polity IV project. This measure attempts to capture the extent to which a polity is characterized by broad participation in a competitive political process. Scores range from 0 (nondemocratic) to 10 (highly democratic). Once again, we run into difficulties over how to rate the EU. For consistency, we follow Guzman and Simmons’ (2002) coding, scoring the EU as highly (9) democratic, but not as highly as the respective democracies of which it is composed of. They argue that while the institution is undoubtedly composed of accountable,

democratically elected governments, the main input into European institutions is restricted to the European Parliament, which has a limited role on policy formation.

According to the literature, the degree of democracy could potentially affect settlement dynamics in various ways. First, highly democratic states generally involve extensive interest group involvement, thereby exacerbating the domestic political costs of concession-making (Gilligan 1997). Consequently, they are pressured by import-competing producers when they are defendants and export-competing producers when they act as complainants. As democracies are held to a higher accountability to domestic constituents, Busch and Reinhardt (2003), argue that negotiating compliance is easier when there is less transparency, ergo during the consultation stage, rather than during panel process and after a panel ruling. Moreover, Busch (2000) offers an additional explanation to expect highly democratic states to resort to authoritative third party rulings. Drawing from the IR literature on interstate disputes, William Dixon (1994) contends that democracies have a greater commitment and trust in international adjudication. Accordingly, Busch finds that, under the GATT, highly democratic pairs are more likely to resort to panels than to settle early.

1.2 Case Characteristics

Building on existing work by Busch and Reinhardt (2003), the remainder of the model is composed of four indicators capturing characteristics of the individual dispute:

1. Whether it was a multilateral case (meaning the case involved more than one complainant).
2. Whether it was a case involving high political stakes (meaning the case was concerned with trade of agricultural products).
3. Whether it was a politically sensitive case (meaning the case involved arguments about biosafety, environmental protection, cultural preservation, or national security).
4. Whether it was a complex case (meaning the case involved trade remedies such as technical barriers to trade, antidumping, safeguards, countervailing measures, subsidies or various other instruments, in contrast to tariffs and quotas).

To elaborate, we code whether a case involved a single complainant, or whether it was filed by more than one complainant and/or separately by different complainants. A higher number of complainants may increase the pressure for defendants to settle early, assuming that higher international reputational sanctions follow an adverse ruling. However, it could also be argued that multiple complainants complicate negotiations, thereby, hindering the likelihood of

concluding mutually acceptable settlement. We do not take third parties into account, as third party participation could be driven by various motivations. As Horn and Mavroidis (2011) contend, it is difficult to untangle the true reasons behind “light” participation by third party observers, as most only participate in the first panel meeting, do not submit any written accounts, and can address whatever issue they deem suitable.

Political stakes reflect the domestic audience costs defendants may encounter. These costs should vary across economic sectors, contingent on the extent to which different industries are able to organize effectively. Following the literature, we argue that the agricultural sector has a particularly strong ability to organize politically, form stakeholder alliances, publicizes disputes, and lobby for protectionist practices. According to the seminal work by Mancur Olson (1971), we should thus observe disputes involving the agricultural sector to involve higher domestic political stakes than those related to the manufacturing sector (Bernauer 2003; Bernauer and Meins 2003; Davis and Shirato 2007; Elsig and Stucki 2012). The domestic audience costs associated with agricultural cases should make it difficult for defendants to accommodate the complainant’s requests.

Following a similar logic, we hypothesize that politically sensitive cases attacking measures justified on grounds of biosafety, environmental protection, cultural preservation, or national security, should be particularly difficult to settle. Specifically, we looked at whether the SPS Agreement was cited in the request for consultations, and/or whether the General Exceptions clauses under GATT Article XX or GATS Article XIV were invoked.³⁵ Additionally, we assume that these cases should be more likely to escalate, as defendants, having invoked these articles, believe that their discriminatory policies may be legitimately justified.

Lastly, we code cases labeled by the WTO as involving tariff and quota as less complex, following a similar logic as the coding by Guzman and Simmons (2002), Sattler et al. (2013), as well as Brewster and Chilton (forthcoming). According to Guzman and Simmons (2002) and later work by Sattler et al. (2013), tariff and quota cases should be easier to resolve and thus more likely to settle early, since they refer to a continuous issue, in contrast to a dispute having an “all or nothing” character. Analyzing compliance with WTO law in case of the US, Brewster and Chilton (forthcoming) maintain that the US has particularly harsh reactions to trade remedy disputes.

³⁵ Note that while DS38 does not fall into one of these categories, we nonetheless code it as sensitive, considering its delicacy for the disputants. We also code DS61 as sensitive, since GATT Article XX was invoked in DS58, which raised the same issues but was filed by a different complainant. Similarly, we code DS90, DS91, DS92, DS93 and DS95 as sensitive, since the SPS Agreement was invoked in the related dispute DS96.

2. Empirical Results

To answer our main hypothesis, we use a probit model, as our dependent variable, Escalation, is binomial, taking either the value of 0 (early settlement) or 1 (ruling). Regarding our main explanatory variable, Institutional Embeddedness, we account for the degree of integration by using DESTA's additive depth index for each agreement relative to the year the dispute was filed. The index is comprised of seven additive variables, which are coded as dummy variables including: Full FTA, Intellectual Property Rights, Government Procurement, Services, Investments, and Competition. Each variable is thus treated as contributing towards the depth of an agreement to the same extent.

In order to account for the fact that some provisions may be more relevant drivers for the depth of agreements than others, we conducted a factor analysis to unravel unobserved, latent variable(s). We do so, as the analysis offers a transparent statistical technique, which suggests weights that different variables should have within the overall indicator (Blume and Voigt 2007). Essentially, the analysis condenses information found in the variables from the additive index into latent factors by assessing the underlying variation (Blume and Voigt 2007). This provides us with a weighted sum, which weighs Services the most and full FTA's the least. This allows us to account for the level of integration prescribed by the agreement through a weighted variable. The analysis results in a weighted sum variable of the defendant's trade agreements, with values ranging from 0 to 12.15.

Summary statistics on all variables are provided in Table 7. Table 8 presents the probit regression coefficients and standard errors of different model specifications, which can be found in Columns (1) to (3). Further Columns show the respective marginal effects at the means for each model, respectively.

Column (1) in Table 8 displays the results of our baseline specification, including all standard control variables. The analysis confirms our hypothesis that Institutional Embeddedness predicts settlement dynamics within the WTO dispute settlement system. This is in line with our assumption that when making decisions within the WTO, defendants take into account how their actions within the multilateral trade regime could affect their standing in related trade institutions. Defendants with a high potential to conclude liberalization commitments in the future will consider the need to maintain a favorable bargaining position in reciprocal trade negotiations. The effects of an adverse ruling on reputation are largely anticipated during consultations, acting as a stimulus for early settlement for defendants that are signatories of a few and shallow agreements. More precisely, we find that the level of integration prescribed by external trade agreements matters, as our results show those

defendants that are members to more deeply integrated agreements are less likely to engage in pre-ruling settlements. This is evidenced by the negative and statistically significant coefficient.

Table 7: Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Institutional Embeddedness	332	3.34	3.45	0	12.15
Political Stakes	332	.386	.487	0	1
Multilateral Stakes	332	.429	.498	0	1
Sensitivity	332	.205	.404	0	1
Complexity	332	.578	.495	0	1
Parliamentary Pair	332	.057	.233	0	1
Non-Parliamentary Pair	332	.804	.397	0	1
Assymetry of Trade	332	.012	.068	-.2	.32
GDP Difference in 1,000,000,000,000\$	332	-1.23	8.55	-14.6	14
GDP per capita Complainant in 1,000\$	332	20.9	15.7	.403	66.7
GDP per capita Defendant in 1,000\$	332	22.8	23.5	.496	340.2
Population of Complainant in 1,000,000,000	332	.252	.285	0.00008	1.33
Population of Defendant in 1,000,000,000	332	.314	.331	.003	1.33
Democracy Polity IV	332	8.43	2.61	0	10
Regime					
Parliamentary-Parliamentary	332	.057	.233	0	1
Presidential-Presidential	332	.464	.500	0	1
PresidentialC-ParliamentaryD	332	.148	.355	0	1
PresidentialD-ParliamentaryC	332	.193	.395	0	1

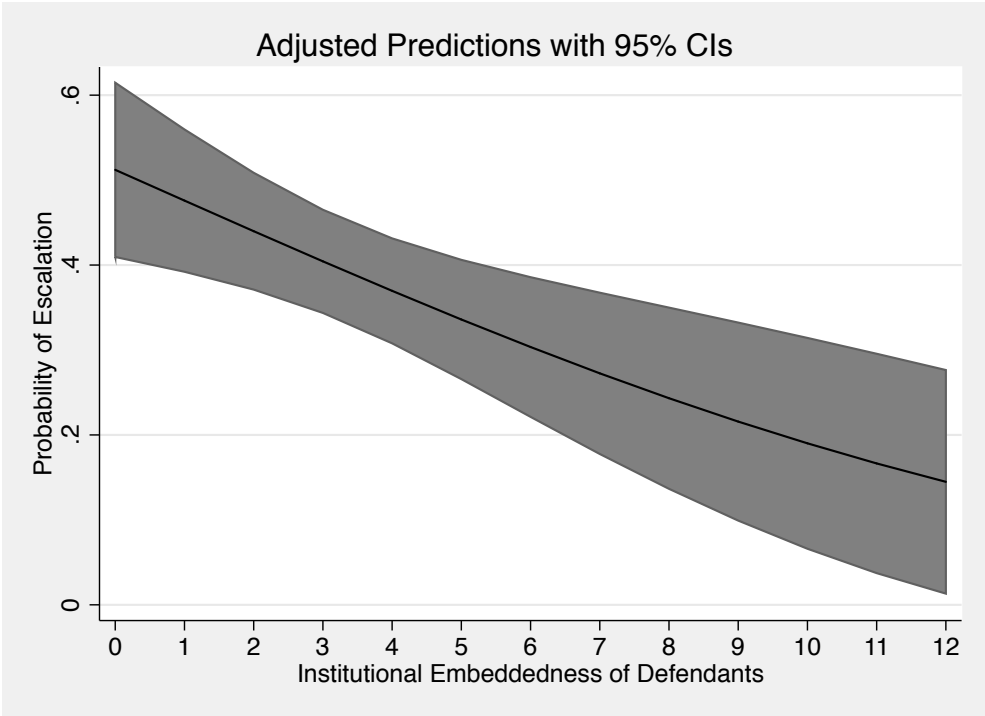
Table 8: Results

Explanatory Variables	(1)	(2)	(3)	M.E. (1)	M.E. (2)	M.E. (3)
Institutional Embeddedness	-.091*** (.032)	-.091*** (.032)	-.094*** (.034)	-.035	-.035	-.036
Political Stakes	.848*** (.190)	.841*** (.191)	.844*** (.191)	.324	.321	.322
Multilateral	-1.026*** (.182)	-1.025*** (.182)	-1.019*** (.183)	-.373	-.373	-.371
Sensitivity	-.771*** (.217)	-.766*** (.217)	-.758*** (.219)	-.266	-.265	-.262
Complexity	.249 (.169)	.248 (.169)	0.251 (0.170)	.095	.095	.096
Parliamentary Pair	.487 (.446)	.413 (.498)		.192	.163	
Non-Parliamentary Pair	-.029 (.253)	-.087 (.305)		-.011	-.033	
Assymetry of Trade	1.641 (1.553)	1.640 (1.552)	1.645 (1.558)	.631	.630	.632
GDP Difference	-.044** (.021)	-.044** (.022)	-.051** (.026)	-.017	-.017	-.020
GDP per capita Complainant	.009 (.007)	.009 (.007)	.011 (.008)	.003	.003	.004
GDP per capita Defendant	-.040*** (.008)	-.041 (.008)	-.042*** (.009)	-.015	-.016	-.016
Population of Complainant	.592* (.343)	.570 (.349)	.649* (.368)	.227	.219	.249
Population of Defendant	.376 (.287)	.404 (.299)	.349 (.296)	.145	.155	.134
Democracy Polity IV		.017 (.049)			.006	
Regime						
Parliamentary- Parliamentary			.479 (.446)			.189
Presidential-Presidential			-.010 (.268)			-.004
PresidentialC-ParliamentaryD			.018 (.322)			.007
PresidentialD-ParliamentaryC			-.123 (.330)			-.046
Constant	0.56* (.325)	.486 (.392)	.551* (.330)			
Pseudo R2	.233	.234	.234			
Observations	332	332	332	332	332	332

Robust standard errors in parentheses *** p<0.01, **p<0.05,*p<0.1

Importantly, the results remain significant at the one percent level, despite alternative specifications and robustness tests. Thus, supporting our theoretical argument, that the “shadow of the future” (Norman and Trachtman, 2008), in the form of ongoing trade negotiations, heightens the sensitivity to reputational sanctions for states with a strong potential and goals for further trade liberalization. Conversely, for those defendants that are already deeply embedded in the trading realm and thus enjoy extensive market access, the marginal value of joining new agreements and/or expanding existing ones diminishes.

For a more detailed analysis of the relationship between dispute escalation and Institutional Embeddedness, we calculated the predicted probabilities at the means (PPM) of early settlement over the whole range of our main explanatory variable. Figure 1 (below), clearly illustrates how the probability of early settlement declines with the degree of the defendants’ integration. Based on Model 1, a defendant that is signatory to trade agreements with a depth measure of 0 will settle early with a probability of 51 percent. At the maximum measure of embeddedness, at 12.15, the probability of early settlement is reduced to 14 percent.



Note: Represents the PPM of dispute escalation, across the range of values of a defendant’s Institutional Embeddedness. The grey areas represent the 95% confidence intervals.

In addition to our main result, we found several of the control variables to be statistically significant. Contrary to our expectation, we find Political Stakes and Sensitivity – while both statistically significant at the one percent level – to have opposing effects. As predicted, the negative coefficient shows that the more sensitive a case is, the less likely it is

to settle early. However, we find that cases involving high political stakes are in fact more likely to settle early. These opposing effects are quite interesting, diverging from the literature and our initial conjecture. Although we subscribe to Sattler et al.'s (2013) argument that disputants may want to settle in order to avoid increased public attention that would make concessions politically costly as the case proceeds to panel, sensitive cases generally attract public attention from the inception. This is evidenced by cases like the *Beef Hormones* and *EC Biotech*. Additionally, for cases dealing with the issue of safety under the SPS Agreement as well as environment, public morals, and national security under the General Exceptions Clause (Article XX GATT/WTO and Article XIV GATS), defendants may believe that their measure may be legitimately justified.

We find that multilateral cases are also less likely to settle early, as evidenced by the negative and statistically significant coefficient. This finding supports the aforementioned assumption that multiple complainants may complicate negotiations and consequently hinder pre-ruling settlements. Additionally, our results show Complexity to have no effect. This is in line with Guzman and Simmons' (2002), who find that complex cases are settled early only among a subset of countries.

In terms of economic controls, we find GDP difference and the Defendants' GDP per capita have significant effects. Specifically, the greater the GDP difference between the disputants, the more likely it is that the case will escalate. This is surprising, considering that complainants with substantial economic leverage over the defendant should be more able to employ credible retaliatory threats. However, in the rare event that retaliation is authorized, it is almost never utilized and has only in a very limited number of cases been effective in bringing about implementation. Retaliation is not, in itself, an ideal tool of enforcement, since economic sanctions are trade diminishing and impose substantial welfare costs on the target as well as the state seeking to retaliate through inefficiency arguments associated with the imposition of protectionist barriers.

Even within a legalized institution like the WTO's DSM, disputants' level of development exerts an impact on dispute outcomes. The importance of power-relationships evidenced by the Defendant's GDP per capita, which we find statistically significant at the one percent level. Our result diverges from Busch and Reinhardt's (2003) observation that developing countries are less likely to settle. Thus, although we can see from the descriptive statistics (see Section IV) that power dynamics have been somewhat equalized, they still have a significant effect regarding dispute outcomes.

Lastly, we find no effects regarding domestic political characteristics. The results show that Parliamentary Pair does not have any significant effect. Since this contradicts the theory, we try to more specifically account for the degree of democracy in a later specification by using the Democracy Polity IV variable (Column 2). However, the results remain unchanged. In an additional robustness check (Column 3), we find that the when controlling for all four possible regime combinations between disputants³⁶ the results of our initial model remain robust.

To sum up, we find that a defendant's level of integration into the trade realm is an important predictor for its propensity to settle early. As we would expect, we find that case specific variables excluding Complexity remain statistically significant in all specifications. Additionally, the Defendants GDP per capita and GDP Difference are significant throughout all model specifications. Finally, we find that political institutions, which we further analyze through a later specification and robustness check, have no effect.

³⁶ Whether the disputing pair involved a complainant and a defendant with a parliamentary government, a complainant and defendant with a presidential government, a complainant with a presidential government versus a defendant with a parliamentary government, or a complainant with a parliamentary government versus a defendant with a presidential government.

VII. PROSPECTIVES

1. Implications

In light of the primary objective of WTO dispute settlement to provide a framework encouraging negotiated settlement (DSU, Articles 3.7 and 11) and its evidenced effectiveness, it is surprising that little scholarship has considered how the system has performed in meeting its goal. While scholars have begun building on the foundation established by Hudec's (1993) seminal work to make progress in understanding the track record of GATT/WTO dispute settlement, little empirical work on the political economy of dispute settlement exists. More research is needed to analyze settlement patterns, addressing how legal review promotes international cooperation and tying empirical results into a coherent theoretical framework.

While in a narrow sense, this study seeks to provide an explanation towards understanding one particular empirical puzzle in the multilateral trading regime, its' findings have broader implications that apply in IL and IR more generally. Among others, we think that its conclusions will be of relevance for research on the institutional influence on state behavior. More narrowly, we contribute to the literature on the operation of adjudicative procedures and the design of dispute settlement institutions at the international level. Demonstrated here in the case of the WTO, our lessons tie into general debates on the political economy of dispute settlement, particularly the operation of reputational sanctions.

We dissent from theories contending that, absent coercion, international institutions exert no independent effect on member behavior. Our findings specifically counter the critique that the structure of the WTO's dispute settlement system undermines the institutions credibility as an effective adjudicator of trade disputes. A failure to take into account the political economic pressures unleashed by legal review lead to mistaken conclusions about institutional effectiveness. Specifically, we show that dispute settlement gains enforcement power by providing and disseminating information on state conduct to observing parties. However, contrary to the established institutionalist argument that participation in international regimes enhances credibility, this study has demonstrated that reputational concerns are especially pronounced for states that are less integrated in the trade realm. Specifically, we have found empirical support for the claim that states that have a high potential to liberalize further are especially vulnerable to reputational sanctions.

We hope that future empirical work on WTO dispute settlement can benefit from the novel data presented. In a global economy increasingly populated by regional and bilateral trade agreements, follow-up work on the role of PTAs in WTO disputes is required in order to understand the value of WTO dispute settlement in a regionalized world.

Some of our results confirm prevailing views about the political economy of WTO dispute settlement. At the most general level, what the data tells us is that consultations continue to be the driving force behind WTO dispute settlement, notwithstanding the more enhanced legal architecture of the DSU. As other studies have found before us, a high number of cases settle early, and most of the fullest concessions are granted during pre-ruling settlement (Busch and Reinhardt 2000). In some trading disputes, most notably involving the US and EU, the simple fact is that if the parties do not settle in consultations, they do not settle (Reinhardt 2001). This reminds us that the system works best when it encourages bargaining in the “shadow of the law” (Busch and Reinhardt 2000). These findings are in line with Hudec’s (1993, p.360) claim that “no functioning legal system can wait until [the verdict stage] to exert its primary impact.”

Our observation suggests that disputing parties find it easier to compromise in a venue that is relatively less transparent (Busch 2000). With every additional stage of the dispute settlement process, a case becomes more visible and thus audience costs become more pronounced. As visibility increases once a dispute has escalated, the domestic political costs of concessions are exacerbated, making it difficult for defendants to accommodate the complainant’s requests. Settling during consultations, then, grants disputants more leeway to strike a deal. This may be especially relevant for democratic regimes, given their greater accountability to domestic constituents (Busch and Reinhardt 2002).

There is an important implication for the rational choice literature on the design of international institutions. A policy prescription that follows concerns recent demands for greater transparency of proceedings, especially during consultations. We would caution against opening up consultations, as well as the panel operation, to more prying eyes. Particularly, we voice our opinion against the call for stronger third party participation during consultation, as well as granting non-governmental and other stakeholders more access to panel proceedings (Hudec 1999). We contend that these proposals are likely to back fire. As ours and other work has shown, early settlement is motivated by concerns about the effects emanating from public legal condemnation. The threat of the “shadow of the law” in form of the information-producing function of an adverse ruling would be eliminated if defendants are

already flagged out during consultations. This, then, will impede the prospects of pre-ruling settlement, jeopardizing the lion's share of positive outcomes achieved by the WTO.

A final prescription concerns our finding that wealthier defendants are significantly less likely to settle early, diverging from Busch and Reinhardt's (2003) observation. We follow their conclusion that legal capacity, as evidenced by level of development, manifests themselves disproportionately during consultations. However, we conclude that power dynamics do play a role, despite the systems increased legalization, as it elicits settlement from poorer defendants. In line with their conclusion, we conjecture that granting developing countries more assistance is necessary for power to be equalized.

2. Future Research

This article has advanced a theory of settlement and litigation within the WTO by illustrating the effect of institutional embeddedness on defendant behavior. Additional theories of early settlement have been advanced before us and we have attempted to account for those by including as many plausible control variables into our model. However, we were not able to quantify some potentially relevant mechanisms in a meaningful way. For instance, one could attempt to ascertain the full value of a case, which could impact the likelihood of dispute escalation. This cannot simply be measured by considering the dispute's economic impact, but is driven by a variety of factors that are impossible to measure, such as the political calculus of the disputant's leaders (Guzman and Simmons 2002).

Additionally, we acknowledge that settlement at the WTO is strongly affected by domestic politics. With regard to our specific argument, the extent to which states' value their reputational standing is determined by domestic political dynamics that are difficult to observe and interpret by other states. However, accounting for the complex domestic political influences of trade negotiations goes beyond the scope of this study. Even in a case study, it is inherently difficult to account for domestic political influences on trade negotiations. Thus, although our study utilizes the state as the actor, we go beyond the convention to capture domestic constraints by controlling for regime type, degree of democratic institutions, agricultural cases, as well as politically sensitive disputes. To capture the influence domestic political concerns exert on trade dispute adjudication, future analysis could empirically account for how domestic industry lobbying affects dispute outcomes.

We have relied on a certain operationalization of depth provided by DESTA's additive depth index, which is comprised of seven key provisions. A follow-up test could use

a more refined measurement of depth (beyond simple categorization). While we tried to account for the main driving mechanisms by conducting a factor analysis in order to capture the underlying latent dimension, it would be interesting to more specifically test for those items that drive agreements' effects. Although we have shown that the relationship between membership in trade agreements and dispute escalation is driven by the level of integration prescribed by agreements, applying a more detailed measurement of depth would allow us to analyze which provisions specifically drive agreements' effects.

Even within the category of free trade agreements, there exists substantial variation as to the provisions enabling new or increased market access (Dür, Baccini, and Elsig, 2014). Testing for more detailed variables that theoretically drive the scope of agreements would allow us to better account for the fact that not all items are of equal importance in establishing the extent of countries' commitments. Fortunately, DESTA will publish a more fine-grained depth dataset on the institutional features of PTAs. This will allow researchers to better analyze the effects of differing depth measures. In particular, for our study, this would provide us a more sophisticated depth measurement, that would permit us to identify the exact depth mechanisms driving the effects of our explanatory variable.

Moreover, follow-up work could further analyze whether our finding holds both for defendants that are party to few or many shallow integration initiatives. It would be interesting to test whether states at early stages of their liberalization effort strive more toward deepening existing agreements or concluding new ones.

Finally, it would be helpful to examine whether defendant behavior in WTO disputes is also motivated by their embeddedness in other areas of IL. When applied as a causal mechanism, states are generally assumed to carry a single reputation for compliance with IL that determines their expected attractiveness as a cooperative partner in all areas. However, the question of whether reputational consequences are in fact fragmented across regulatory areas ranks among the most contentious issues in the current conceptualization of the concept.

If actions in the trade realm pose reputational consequences on other fields of IL, then defendants should take their existing embeddedness in other venues into consideration. Testing whether defendants who are not yet engaged in many integration initiatives in other fields of international cooperation are more likely to settle early, seems like a fruitful starting point toward collecting empirical evidence on this question. One obvious hypothesis is that reputation might spill over to "adjacent" issue areas such as other economic agreements. For more distant issues such as environment or human rights, the reputational impact should presumably be still less. As explained by Guzman (2008, p. 103), "it is likely that states have

different reputations in different issue areas, but that these reputations are related to one another.”

VIII. CONCLUSION

Empirical investigations of litigation at the WTO reveal a noteworthy pattern: the majority of disputes settle early, either during consultation, or prior to the issuance of a panel ruling. This is surprising, as the DSM's remedial regime undermines the system's deterrent effect. This should provide defendants with economic incentives to keep any discriminatory measures in place as long as possible, opting for full adjudication instead of pre-ruling settlement.

Considering that the threat of economic penalty is not sufficiently credible to preclude litigation, it has been argued that the expected costs of formal adjudication must be of political rather than economic. Specifically, this study has theorized and empirically tested whether states' concern for their reputational standing influences their strategic behavior during interstate dispute resolution. The claim that state conduct is moderated by reputational concerns finds support from two sources: theoretically, as derived from a rational choice analysis of international institutions and state behavior, as well as, empirically, from evidence on settlement and concession-making observed at the pre-ruling stage.

In light of the substantial rate of pro-plaintiff rulings issued (consistently 80 to 90 percent), it is argued that WTO adjudication exercises a deterrent effect, despite the absence of coercive enforcement, by disseminating information on state conduct and, thereby, unleashing reputational pressures. With every additional stage of the dispute settlement process, a dispute becomes more visible and audience costs become more pronounced. The "shadow of the law," in the form of looming legal condemnation, then serves as an explanation toward observed patterns of early settlement (Busch and Reinhardt 2000). An adverse ruling by a panel widely broadcasts to the international audience that the defendant has defected on the agreed-on terms of its multilateral trade obligations.

Building on the emerging stream of literature interested in the interaction between overlapping institutions, we find that the extent to which reputational concerns are able to elicit early settlement is contingent on the degree to which the defendant is embedded in the wider trade realm. Drawing on the law and economics perspective that international agreements are essentially unfinished, long-term open contracts, we argue the fear of reputational spillovers acts as a deterrent for defendants that are signatories to a few, less integrated external trade agreements. Specifically, the "shadow of the future" (Norman and Trachtman, 2008), in the form of ongoing trade negotiations, heightens the sensitivity to reputational sanctions for states with a strong potential to increasing market access in the future. Opposing established views, this manifested itself in the finding that early settlement is more pronounced among defendants that are less integrated in the international trade realm.

Specifically, our results diverge from the institutionalist argument that participation in international regimes exposes states to greater reputational costs. Legal condemnation stemming from an adverse ruling cautions existing institutional partners as well as observing parties, which is especially costly for states that wish to liberalize further.

Our theory has combined two emerging strands of research: At a time when trade agreements are increasing, it is important that the effect institutions exert on WTO disputes is analyzed in order to understand the value of the WTO dispute settlement system in a regionalized world. Despite the growing number of trade agreements, scholars possess little empirical knowledge concerning the interaction of these institutions, and even less exists that attempts to tie empirical results into a reasonably coherent framework. In order to accurately reflect the ability of trade agreements to impose costs on and withdraw benefits from their members, we account for institutional design variation and diverse levels of integration.

Our theory stands up to empirical scrutiny against a novel dataset of 233 trade agreements. Our results confirm our hypothesis that Institutional Embeddedness predicts settlement dynamics within the WTO dispute settlement system. States that have a lot to lose from being excluded from future integration initiatives send a costly signal by settling early, thereby, making their desirability as a cooperative partner more credible. Conversely, those defendants that are party to more deeply integrated agreements are less likely to engage in pre-ruling settlement. For those defendants that enjoy extensive market access, the marginal value of joining new agreements and/or expanding existing ones diminishes. Thus, supporting our theoretical conjecture that the “shadow of the future” (Norman and Trachtman, 2008), in the form of ongoing trade negotiations, heightens the sensitivity to reputational sanctions for states with a strong potential and goals for further trade liberalization.

Overall, these results offer important insights into the role that dispute settlement plays in international trade policy. While we have shown that the WTO dispute settlement gains enforcement power by unleashing reputational pressures, dispute escalation does not always clearly reveal a defendant’s preference for defecting on its trade commitments. While reputational costs can dissuade states from violating the agreed-on terms of their agreements, we recognize that reputation operates at the margin and there many instances where a state’s interests supersede compliance with international law. Given the complexity of these measurement problems, we intend to offer a first cut toward the goal of developing conceptual approximations capturing reputational concerns in the trade realm. However, compliance decisions remain complex and susceptible to multiple interpretations. The measurement of

reputation presented here ranks among the few attempts to provide a coherent operationalization of this causal mechanism for empirical studies.

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