# How Do Global Trade Rules Evolve? Strategic Sequencing In International Economic Law<sup>\*</sup>

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#### Abstract

How do negotiators introduce contentious innovations in international economic law? When the EU revised the investment clauses of its recent trade deal with Canada, it was widely believed that the amendments were motivated by concern over the design of another, yet-to-be-signed agreement with the United States: the Transatlantic Trade and Investment Partnership. Yet, there is no formal link between those two agreements. Indeed, the literature generally sees preferential trade agreements (PTAs) as products of signatories' bilateral relations. This article challenges this view. I argue that past agreements create precedent that shapes subsequent agreements, and that policymakers act accordingly. Specifically, I argue that the sticky nature of legal language creates incentives for states to sequence agreements, signing ambitious PTAs with less important partners to establish model agreements for use with more important partners. A two-stage regression analysis on the sequencing and design of bilateral PTAs from 1965 to 2016 supports this argument. I show that for states that care most about enforcing global trade rules, agreements that are under-predicted by an economic and political gravity model tend to be more ambitious, and signed sooner. In a test of the mechanism at play, I show that these same states are more likely to 'ratchet' agreements, progressively increasing depth over time. This is further borne out in evidence from recent agreements negotiated by the EU and New Zealand. Legal language has a way of sticking around, and states know it. Thus, states sign agreements with an eye to the future.

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# 1 Introduction

Trade and trade agreements have become hotly contested issues in the early 21st century. One sees this in the 'twin shocks' of 2016 (Brexit/Trump), which harnessed anti-globalist and populist sentiment in Britain and the United States. One sees it also in mobilization against major regional trade deals. These have spanned from the Asia-Pacific, where activists rallied against the Trans-Pacific Partnership (TPP), to Europe and North America, home of deals between the EU and the USA (the Transatlantic Trade and Investment Partnership, TTIP) and the EU and Canada (the Comprehensive Economic and Trade Agreement, CETA). An element of this opposition to trade deals undoubtedly stems in part from the slow recovery of major economies from the 2008 financial crisis and the failure of trade assistance programs designed to help workers harmed by trade liberalization. But it seems also to speak to public concern over the growing scope of recent agreements. For much of the period after 1945, trade liberalization took the form of reducing at-border barriers like tariffs. In the past 25 years, however, trade deals have progressively dealt with other areas of international commerce such as foreign investment, intellectual property, and domestic standards regimes. Perhaps because these non-tariff or 'behind-border' barriers tend to reflect genuine regulatory efforts rather than protectionism,<sup>1</sup> these new areas of international economic liberalization have seemed particularly ripe for politics.

So febrile is the mood around these new issues that even non-signatories take a keen interest in the rules that other states make in their agreements. In late 2015, European Union trade officials approached their Canadian counterparts to request the renegotiation of the investor-state clause in the CETA.<sup>2</sup> A request for renegotiation of a completed agreement is unusual in the politics of international negotiation. Yet when the Canadian Broadcasting Company (CBC) broke the news, the reason cited for the re-negotiation was not just concern over CETA itself, but over another agreement, yet to be concluded: the TTIP with the United States (US). A member of Ontario's legal team during the CETA talks, Mark Warner, suggested that in the event that Canada agree to reform the investor-state dispute clause in CETA, "the Americans will be pretty pissed off at us". The CBC quoted Warner to suggest that "[i]f Canada agrees to a compromise the U.S. doesn't

<sup>&</sup>lt;sup>1</sup>Baldwin (2012), 11-12. Although as Kono (2006) demonstrates, behind-border barriers are also used as protectionism.

<sup>&</sup>lt;sup>2</sup>The EU's reformed approach to investor-state arbitration was also included in the EU-Vietnam FTA, negotiations for which were concluded in December 2015.

want, 'it's like throwing a finger into their eye.'"<sup>3</sup>

This concern is surprising because there is no formal link between CETA and TTIP. Although the renegotiation came in the context of sustained public debate over the appropriate scope of European trade agreements in general, the conventional view in the literature on the motivation for and design of trade agreements sees agreements largely as a function of signatories' economic and political ties with one another. In political economy, this perspective is found most strongly in approaches that view trade agreements as 'rationally designed'<sup>4</sup> means by which governments overcome domestic demands for protectionist policy by exchanging credible commitments to maintain open access to important economic markets (especially in hard times).<sup>5</sup> This approach is best illustrated by political and economic 'gravity model' approaches to trade agreements, that views such institutions as a function of economic characteristics of partners.<sup>6</sup> Even to the extent that the economic gravity model takes global momentum towards preferential trade agreements (PTAs) into account, these perspectives leave little room for the concerns of non-signatories over the design features of other states' agreements. What explains the interest of the US (a non-signatory) in CETA? If the CETA renegotiation reflected concerns about TTIP, why would the EU seek to innovate on such an important aspect of its trade and investment agreement-making practice through a costly renegotiation with Canada, rather than seeking to adopt the new approach in subsequent agreements, such as with the US?

I use such third-party concern over others' agreements as a lens through which to question the conventional narrative about *why countries sign trade agreements* and *how innovative rules emerge.* The CETA case is not unique, nor is third-party concern limited to instances of renegotiation. Non-member interest in the rules of another 'mega-regional' agreement, the 12-member Trans-Pacific Partnership (TPP), underpin suggestions that the TPP represented an opportunity for the United States to play a leading role in setting a new generation of broader trade rules. I argue that existing agreements create precedent that shapes the design of subsequent agreements, and that policymakers sometimes take such precedent into account by *sequencing* trade agreements,

 $<sup>^{3}</sup>$ McGregor (2016).

<sup>&</sup>lt;sup>4</sup>Koremenos, Lipson, and Snidal (2001).

<sup>&</sup>lt;sup>5</sup>Grossman and Helpman (1994); Mansfield, Milner, and Rosendorff (2002). For a range of perspectives on why countries sign, see the contributions in *Trade Cooperation: The Purpose, Design and Effects of Preferential Trade Agreements* (2014).

<sup>&</sup>lt;sup>6</sup>Mansfield and Milner (2012); Baier and Bergstrand (2004); Baier, Bergstrand, and Mariutto (2014).

signing ambitious agreements with less important partners first so as to improve the odds of achieving their preferred agreement design in subsequent negotiations with more important partners. Yet, I argue that not all states are likely to sequence. I expect that the states most likely to sequence are those that have strong preferences about global trade rules, and which have the legal capacity to proactively advance their preferences through the negotiation of international economic law. To the extent that sequencing is effective in enabling states to promote the adoption of their preferred rules, this would suggest that sequencing has distributional consequences: wealthier states with developed trade bureaucracies are more likely to see their preferred agreement design taken up by the wider membership of the international trade and investment regime.

International agreements are not negotiated from a blank slate each time, but build on the foundations laid by previous deals. States are therefore rightly conscious of the third-party effects of their international treaties: agreements signed now are likely to shape the design of agreements in the future. There is already evidence of this assertion from a recent literature on the diffusion of specific treaty provisions, which demonstrates empirically what any international trade lawyer will acknowledge: legal language has a way of sticking around.<sup>7</sup>

The 'stickiness' of legal language is, however, generally used to explain the form of *sub-sequent* legal texts. There has been far less evaluation of the potential political incentives that 'sticky' legal language creates, or of the international or domestic political economy of 'sequenced' agreements. This paper begins to address these issues. At its core, it is motivated by the broader question of how the gradual shift to a system of trade rules negotiated preferentially (as opposed to multilaterally) affects the international and domestic political economy of international economic rule-making. Here, I focus specifically on the sequence in which the building blocks of international economic law are created.

I argue that the sticky nature of legal language creates incentives for states-particularly those states that have the strongest preferences over the legal content of the international trade regime and the legal capacity to act on those preferences-to cement their preferred agreement design with lower-value partners, in order to improve the odds of replicating this design with more economically or strategically important partners. In international negotiations, precedent enables

<sup>&</sup>lt;sup>7</sup>On the general point, see Pelc (2016). On PTAs and international investment agreements see Allee and Lugg (2016); Alschner (2013); Alschner and Skougarevskiy (2015); Pauwelyn (2014); Meunier and Morin (Forthcoming); Morin, Pauwelyn, and Hollway (2017); Paulwelyn and Alschner (2015).

states to bring their past policy approach to bear on current negotiations with trade partners. Domestically, precedent arms state actors with a potential rationale for the inclusion of clauses in international agreements that might otherwise be overly politically contentious.

This perspective on sequencing leads to a counter-intuitive hypothesis. If states sign agreements with less valuable economic partners partly in order to establish favourable precedent, then agreements that are less well-predicted should be *more*, not less, ambitious in their scope, and should be signed sooner than other agreements. I further expect that these outcomes will be clearest for states that have the strongest demonstrated interest in the rules of the global trade regime.

I test the argument quantitatively using a two-stage regression approach with data from the Design of Trade Agreements (DESTA) database, the most comprehensive project of coding international trade agreements.<sup>8</sup> Using a gravity model approach that includes both economic and political variables,<sup>9</sup> I predict the likelihood of a country-pair signing a preferential trade agreement (PTA). I first compare the factors predicting PTA signature and those predicting 'innovative' agreements, where states sign a deeper agreement for the first time. I show that relative to other agreements, innovative agreements are associated with lower trade values and greater differences in the GDP of signatories, suggesting that they are signed with less important economic partners, as compared with non-innovative agreements. I then use predicted probabilities from the first stage regressions to identify PTAs that are poorly predicted by economic and political variables. In second stage regressions, I correlate these under-predicted PTAs with agreement depth and with signature order. I use countries' participation as Third Parties in the WTO's Dispute Settlement Understanding (DSU) mechanism as a proxy for the intensity of their preferences over the legal content of the global trade regime. Using data on states' participation in disputes, I identify states that not only participate as Third Parties, but those that choose to make submissions in a dispute, as this captures a clearer expression of interest in the rules covering a particular issue-area in trade. Consistent with my theory, I show that for states that are most active as Third Parties in the DSU, poorly predicted PTAs are both more ambitious and signed earlier. As a test of the mechanism at play, I show that these same states (more active as Third Parties) are more likely

<sup>&</sup>lt;sup>8</sup>Dür, Baccini, and Elsig (2014).

<sup>&</sup>lt;sup>9</sup>Baier and Bergstrand (2004); Baier, Bergstrand, and Mariutto (2014); Mansfield and Milner (2012).

to 'ratchet' agreements, progressively increasing the depth of their agreements over time. Taken together, this evidence suggests that states are not only aware of the precedent that agreements set for future negotiations, but that they seek to use precedent to their advantage, signing innovative agreements with less important economic partners in order to improve the odds of subsequently achieving similarly ambitious agreements with more important partners.

This argument complements standard political-economy and economic explanations for international economic agreements. By pointing to the role of precedent, I highlight a novel source of benefits for signing that helps to explain decisions to sign (or amend) agreements where the domestic political or economic rationale may be less compelling. In doing so, this article links several research areas in International Political Economy (IPE) specifically, and International Relations (IR) more generally. Most importantly, the article returns to questions about the emergence and evolution of global regimes—in this case, in trade—that have animated the study of international politics since at least the early 1980s: How do global regimes matter? Whose rules do they reflect, and how do they evolve over time?<sup>10</sup> These questions have returned to the fore given the emergence of new global powers and the ongoing importance of regionalism as an institutional characteristic in the trade regime.<sup>11</sup> How do these changes in world politics affect the scope conditions under which international economic regimes are created and contested?

The second area to which the article contributes is an ongoing question about why states sign international economic agreements, particularly where trade may not be the main motivating factor.<sup>12</sup> The present paper suggests a novel motivation. It does so by building on a new research area in international relations, that of precedent–what is it, and how does it work?<sup>13</sup> Linking the notion of precedent to the literature on trade negotiations adds an additional finding to an important literature on policy diffusion,<sup>14</sup> by suggesting actors might anticipate the future adoption of present policy, and thereby manipulate the circumstances of policy innovation.

Section 2 outlines a theory of PTA sequencing, and places it in the context of current explanations for the entry into PTAs. Section 3 describes the data and measures, and the analytical

<sup>&</sup>lt;sup>10</sup>?Krasner (1983); Ruggie (1982); Stein (1982).

<sup>&</sup>lt;sup>11</sup>Mansfield and Milner (1999).

 $<sup>^{12}</sup>$ Aggarwal (2013). Earlier statements often focused on security concerns, e.g.: Higgott (2004), which in turn echoes an earlier literature on the 'security externalities' of trade: Gowa (1994); Gowa and Mansfield (1993).

<sup>&</sup>lt;sup>13</sup>Lauterpacht (1982); Lupu and Voeten (2012); Pelc (2014, 2016); Hawkins (2004).

<sup>&</sup>lt;sup>14</sup>Among many other contributions, see Elkins, Guzman, and Simmons (2006); Elkins and Simmons (2005); Morin and Gold (2014).

approach used to test the argument. Section 4 outlines the results from this quantitative analysis, while section 5 presents qualitative evidence drawn from the recent experiences of the EU and New Zealand. In section 6 I sum up the evidence and outline avenues for further research.

# 2 Sequencing in international economic law

## 2.1 Motivations for PTAs

Why do states sign international agreements, about what do they sign them, and with whom do they do so? In political science and economics, the standard view is that signature is a function of states' domestic political economies and of the relationships between countries. The most common version of this perspective sees PTAs as commitment devices, by which country leaders voluntarily and formally give up some policy autonomy (e.g., the ability to increase barriers to international commerce), in order to achieve a policy objective that might be undone as a result of future susceptibility to political mobilization. This 'credible commitments' account of PTAs underpins much of the literature in international political economy.

Dominant models in IPE tend to view the negotiation of trade agreements in relatively discrete terms: leaders seek to reassure their electorate of their commitment to economically beneficial policy;<sup>15</sup> social actors lobby the government in support of liberalization (or in opposition to it) in order to internalize economic externalities created by barriers to trade with that partner;<sup>16</sup> state actors seek to overcome domestic resistance to particular reform at a particular moment;<sup>17</sup> or powerful states use agreements to secure foreign policy concessions from allies and adversaries.<sup>18</sup> Missing from most of these perspectives is an engagement with the question of timing and sequenc-ing.<sup>19</sup>

We know that pro-trade coalitions tend to grow in size and power over time as the gains from liberalization accrue to firms that trade more intensively.<sup>20</sup> Yet this is generally taken to be an (unintended) by-product of liberalization, rather than the result of a forward-looking strategy. Although gradualism as an approach to trade liberalization is not a novel idea, it is understood as

<sup>&</sup>lt;sup>15</sup>Mansfield, Milner, and Rosendorff (2002); Mansfield and Milner (2012).

<sup>&</sup>lt;sup>16</sup>Mayer and Ottaviano (2007); Osgood et al. (2017); Osgood (2016); Baldwin (1997); Moravcsik (1998).

<sup>&</sup>lt;sup>17</sup>Baccini and Urpelainen (2014); Whalley (1998).

 $<sup>^{18}</sup>$ Feinberg (2003)

<sup>&</sup>lt;sup>19</sup>For partial exceptions see Dent (2003); Feinberg (2003).

<sup>&</sup>lt;sup>20</sup>Melitz (2003); Baldwin and Robert-Nicoud (2015); Baccini, Pinto, and Weymouth (2017).

a way of enabling domestic groups to adjust gradually to new policy (e.g., liberalization),<sup>21</sup> rather than an attempt to achieve convergence on desired legal or regulatory approaches.

In trade economics (and indeed in political science), a common approach is therefore to view agreements as a function of the economic relationship between countries. The best example of this is the economic 'gravity model' approach.<sup>22</sup> As well as predicting likely PTA partners, this perspective on trade agreements also logically leads to predictions about the likely scope of agreements. Within some limits (for instance regarding agreement flexibility), what makes agreements credible is the limits they place on domestic leaders. Yet, such limits are costly. The current public backlash against trade agreements appears strongly motivated by perceived losses of national sovereignty. As agreements go deeper into the domestic policy realm, they limit increasing amounts of policy autonomy. To offset this, greater commitment should accordingly be balanced by greater economic gain.<sup>23</sup> As such, viewing PTAs as credible commitments to secure market access suggests that cost and benefit should be positively correlated. Those agreements that have the greatest scope should be signed with the most important economic partners, and the scope of agreements in general should be driven by the relationship between signatories.

## 2.2 Precedent and diffusion

Yet, since at least Ross and Homer,<sup>24</sup> political scientists have also acknowledged that policy enacted in one location may have its origins in another place or time. This insight echoes through work on sociological and historical institutionalism in comparative politics,<sup>25</sup> to a more recent literature on the diffusion of international economic agreements. In the trade (and investment) regime, the large number of PTAs in force suggest that their signatories are likely to take existing agreements into account.<sup>26</sup> Diffusion processes have been described in investment regulation,<sup>27</sup> as well as trade and investment agreements.<sup>28</sup> The insight from this work is that the adoption of policy is explained in part by previous policy. Theorized diffusion mechanisms include competition effects, consensus on

<sup>&</sup>lt;sup>21</sup>Chisik (2003).

<sup>&</sup>lt;sup>22</sup>Baier and Bergstrand (2004); Baier, Bergstrand, and Mariutto (2014)

 $<sup>^{23}</sup>$ Baldwin (2012).

 $<sup>^{24}</sup>$ Ross and Homer (1976)

<sup>&</sup>lt;sup>25</sup>March and Olsen (1998); Hall and Taylor (1996); and especially Pierson (2004)

<sup>&</sup>lt;sup>26</sup>Alter and Meunier (2009); Meunier and Morin (Forthcoming); Morin, Pauwelyn, and Hollway (2017).

<sup>&</sup>lt;sup>27</sup>Elkins, Guzman, and Simmons (2006); Elkins and Simmons (2005); Jandhyala, Henisz, and Mansfield (2011); Simmons and Elkins (2004).

<sup>&</sup>lt;sup>28</sup>Baccini, Dür, and Haftel (2014); Baccini and Dür (2012, 2015); Morin and Gold (2014); Leslie (2015).

best practice, emulation, and coercion, which are likely to interact with one another.<sup>29</sup>

These perspectives provide a partial explanation of third-party interest with other states' agreement design; policy diffusion implies that observations are linked over time and space. The above approaches generally seek to explain present policy as a function of previous (exogenous) policy. I argue however that future policy may also motivate the design of present policy. The distinction is a subtle one, since it is not a great leap to suggest that actors might actively seek the diffusion of their preferred policies. A vibrant research program in comparative regional integration has indeed documented the EU's efforts to promote its own model of regional integration elsewhere, for instance.<sup>30</sup>

The notion of precedent is key to the argument. Precedent occupies a central role in the evolution of domestic law (particularly in common-law countries), but international courts and arbitral institutions are not formally bound by precedent. Nevertheless, as scholars of international law have long demonstrated, international judges and arbitrators often rely on precedent, or precedential reasoning, in reaching decisions.<sup>31</sup> This observation has led to what some scholars call *de facto stare decisis*—de facto precedent. Among other contexts, de facto precedent has been demonstrated in the international trade regime—for instance in the use of *judicial economy*—the decision not to rule on certain legal arguments pertaining to a dispute—by World Trade Organization (WTO) panels.<sup>32</sup> DSU panels appear to limit the amount of legal precedent created in response to the wider membership's ambivalence about the potential scope of a ruling.<sup>33</sup> Even more strikingly, it appears that WTO members manipulate the power of precedent. The EU has been shown to establish, and subsequently exploit, de facto legal precedent in WTO jurisprudence by winning small claims in policy areas where a favourable precedent would subsequently enable commercially important claims.<sup>34</sup>

This exploitation of precedent is germane to the present argument, although I consider precedent from a different angle. Here, I refer to the creation of precedent in agreement design– the establishment of models for the content of agreements. This use of the notion of precedent is

 $<sup>^{29}</sup>$ Morin and Gold (2014).

<sup>&</sup>lt;sup>30</sup>Among many other examples, see Börzel and Risse (2012); Björkdahl et al. (2015).

<sup>&</sup>lt;sup>31</sup>Lauterpacht (1982).

 $<sup>^{32}</sup>$ Bhala (1999).

 $<sup>^{33}\</sup>mathrm{Busch}$  and Pelc (2010).

 $<sup>^{34}</sup>$ Pelc (2014).

perhaps more closely aligned with an ordinary usage of precedent, as in actors being leery of certain behavior lest it 'set a bad precedent', or actors seeking to justify their actions on the basis of past behavior. As Hawkins discusses, this use of precedent to understand behavior within international organizations has a long history, and a more recent literature applies these insights to understand state behavior in international relations generally.<sup>35</sup> The normative pull of precedent means that states are likely to continue to behave as they have done in the past, even absent a functional rationale for such behavior.<sup>36</sup>

We observe attempts to set precedents in agreement design in political rhetoric that seeks to establish the legitimacy of a particular model of treaty-making. During its negotiation, the TPP was routinely referred to by its members as setting a 'gold standard', with the express implication that it would set a high bar for agreements that would follow. Incredibly, even with its domestic defeat in the US, other signatories continue to hold it up as an exemplar. New Zealand's High Commissioner to Shanghai affirmed, "I think it is the gold standard. And it's not to say that every agreement since is going to reach that standard, but why not, if it can?"<sup>37</sup> Precedent in this sense would appear to operate on the basis of legitimacy: if a certain approach becomes viewed as best practice, it is likely to be replicated in subsequent agreements, even where, as in the case of the TPP, the original agreement has not created legal or political-economic motivations for continuing with an established approach. The observation that the benefits of an agreement may be used as a positive demonstration to other countries–as was hoped for example with New Zealand and Australia's agreement with the Association of Southeast Asian Nations<sup>38</sup>–adds to this notion. Legitimacy at least partially motivates state behavior.

If legitimacy operates through the creation of normative standards for the appropriate scope of agreements—as in setting a 'gold standard'—it also appears to underpin the rhetorical process of bargaining. Where a country grants one partner a certain degree of access in a given issue-area, it strengthens the negotiating hand of later partners. Australia appeared to have experienced with no fewer than three negotiating partners. Chapter 11 of the Australia-US FTA (AUSFTA) included investment commitments whereby US firms could invest up to A\$1.062 billion in non-sensitive

<sup>&</sup>lt;sup>35</sup>Hawkins (2004), 786-787.

<sup>&</sup>lt;sup>36</sup>Hawkins (2004),786; Finnemore (1996).

<sup>&</sup>lt;sup>37</sup>Interview with Guergana Guermanoff, Shanghai, 19th June 2017.

 $<sup>^{38}</sup>$ Castle (2017), 15

areas without needing the approval of Australia's Foreign Investment Review Board (FIRB). South Korea, China, and Japan all later sought the same limit that had been extended to the US, with South Korea reportedly "setting as a non-negotiable condition of completing a free trade agreement".<sup>39</sup> Here, Australia's previous agreement with the United States established as a baseline certain concessions that later parties subsequently sought. New Zealand's High Commissioner agrees with this dynamic: "if another party negotiates an agreement, then you want to match it in your own, so that's your precedent."<sup>40</sup>

Finally, given that trade agreements often bring about changes in the domestic political economy, agreements are likely to set precedents to the extent that domestic groups resistant to trade liberalization may have already borne the costs of adjusting to liberalization after the first agreement and may be less able or motivated to oppose later agreements that follow the same course. Similarly, pro-trade interests are likely to have gained political power in line with their material gains from freer trade. This notion of course sits behind trade economist Richard Baldwin's 'juggernaut' explanation of the spread of regionalism,<sup>41</sup> as well as recent insights into the firm-level distributional effects of trade agreements.<sup>42</sup> As New Zealand's High Commissioner to Shanghai puts it once again in the context of the TPP 'gold standard', "once a country has found its way to kind of accommodate that kind of ambition... why go backwards? You've gone through a certain amount of political pain to get there."<sup>43</sup>

It is important to be clear about the model of domestic politics envisaged by this argument. A sequencing perspective potentially disrupts the usual 'supply' and 'demand' metaphor for government policy, whereby social actors 'demand' certain policy, which is then 'supplied' by the government. Some observers have demonstrated that while the 'supply' and 'demand' metaphor is a useful one, it should not be turned into an assumption: the role of policy 'demandeur' may also be played by government, including in the context of international economic integration.<sup>44</sup> This does not necessarily imply that social actors are no longer the 'demandeurs' of policy–although it

<sup>&</sup>lt;sup>39</sup>Toh, Han Shih. 2013. 'China to Push Australia on "Fairer" FTA Terms Amid Perceptions of Bias, Beijing Will Press Canberra for Equal Treatment with US Firms to Clear the Way for Free-Trade Deal, Analysts Say.' South China Morning Post, Dec 06, 2. https://search.proquest.com/docview/1465089340?accountid=12339.

<sup>&</sup>lt;sup>40</sup>Interview with Guergana Guermanoff, Shanghai, 19th June 2017.

<sup>&</sup>lt;sup>41</sup>Baldwin and Robert-Nicoud (2015).

<sup>&</sup>lt;sup>42</sup>Baccini, Pinto, and Weymouth (2017).

<sup>&</sup>lt;sup>43</sup>Interview with Guergana Guermanoff, Shanghai, 19th June 2017.

<sup>&</sup>lt;sup>44</sup>Castle, Le Quesne, and Leslie (2016); Ravenhill (2010). Similarly see Gruber (2000).

may. It does imply a more iterative process of policymaking, whereby current policy is conceived as an investment towards future goals.

#### 2.3 Why sequence?

Sequencing is particularly appropriate in an era of proliferating PTAs that increasingly regulate 'deep' behind national borders.<sup>45</sup> Agreement in areas such as services, intellectual property and foreign investment, as well as non-trade issues such as human rights and environmental standards,<sup>46</sup> is a relatively new feature of international economic agreements. Because reaching agreement in these areas often involve aligning domestic regulatory regimes, the novelty of regulating these issue areas creates an increased payoff to states and economic actors whose preferred rules become widely accepted. This line of thinking appears to sit behind political rhetoric from the highest office in the US: "We have to make sure America writes the rules of the global economy" (lest China do so).<sup>47</sup>

The more political nature of regulatory efforts in 'new' areas of international commerce is clear in 2017. Recent efforts to negotiate 'mega-regional' trade agreements have run afoul of this politicization. European countries have witnessed a backlash against the Transatlantic Trade and Investment Partnership (TTIP) with the US as well as the Comprehensive Economic and Trade Agreement (CETA) with Canada. In the US, the politicization of trade saw both 2016 presidential candidates oppose the Trans-Pacific Partnership (TPP) agreement, which itself was the subject of mass demonstrations in many of the 12 member-countries during its negotiation. Agreements that touch on 'new' issues are also more likely to be the subject of leaked negotiation documents.<sup>48</sup>

Yet it is unlikely that all states act strategically to sequence agreements. It is more likely that states that have stronger preferences about global trade rules will attempt to use precedent to influence the design of future trade laws. This would be in line with the motivating example of the EU presented in the introduction: the EU is often seen as a 'normative power' or more recently a 'market power'.<sup>49</sup> It would be overly optimistic to presume that the strength of preferences

<sup>&</sup>lt;sup>45</sup>Lawrence (1996).

 $<sup>^{46}</sup>$ Milewicz et al. (2016).

<sup>&</sup>lt;sup>47</sup>Barack Obama. 'Remarks by the President on trade.' Beaverton, Oregon (May 08, 2015). Available at https://obamawhitehouse.archives.gov/the-press-office/2015/05/08/remarks-president-trade (retrieved June 2016). <sup>48</sup>Castle and Pelc (2017).

 $<sup>^{49}</sup>$ Damro (2012).

equate smoothly to outcomes, however. As observers of international organizations have cautioned, participation in such institutions remains unequal. Even though the creation of global institutions– especially multilateral institutions–are celebrated as the means by which the effects of power are moderated in the international system,<sup>50</sup> power continues to matter. Importantly in the context of trade law, Steinberg has shown how power-based bargaining has been an important feature of certain bargaining rounds at the GATT/WTO, despite those institutions' adherence to principles of sovereign equality.<sup>51</sup> States are likely to sequence international agreements not only on the basis of their preferences, but also on the basis of their capacity.

In addition, as is plain to students of international relations, power matters in any situation involving inter-state bargaining.<sup>52</sup> For most states, establishing a track record of regulating a given issue in a certain way may be unlikely to grant much of an advantage in subsequent negotiations with a major partner if the issue is an important one.: the US is hardly likely to accept New Zealand's preferences on pharmaceutical patent periods simply because New Zealand and Australia have already done things a certain way. Despite this, precedent clearly motivates negotiators. This is apparent in remarks by New Zealand officials regarding piloting certain approaches with China in the hope that this would then be replicated in concurrent negotiations for the 16-nation RCEP, a point I return to below.

Before turning to the testable implications of PTA sequencing, it is important to be clear about where sequencing fits as a strategy of innovation in trade agreements. It will surely strike the reader that innovation is also likely to take place in circumstances where agreements are well predicted by economic factors. Perhaps most obviously, NAFTA is frequently regarded as the source of considerable innovation in the design of trade agreements. A similar argument can be made regarding agreements underpinning European integration. In these contexts, intra-regional trade is high and agreements are therefore very likely. The argument is not that states only use under-predicted PTAs to set favourable precedents. It is rather that the precedential benefits of sequencing provide a novel motivation for signing agreements, even where economic and political benefits are less compelling.

<sup>&</sup>lt;sup>50</sup>Ruggie (1992); Ikenberry (2001).

<sup>&</sup>lt;sup>51</sup>Steinberg (2002). The judicious use of hypocrisy is one way in which powerful states benefit disproportionately from the institutions they create. Finnemore (2009).

 $<sup>{}^{52}</sup>$ Drezner (2007).

### 2.4 Testable implications

I expect that states should seek to sign agreements earlier with economies with which they are able to experiment with design features of international agreements. While liberalization with these states may be inherently beneficial, the economic gains that motivate these agreements also stem from liberalization envisaged with other states. As such, agreements that are not well-predicted economically should be *more ambitious* than they should be. If states are using these agreements to shape future liberalization, then evidently they should also be signed *sooner*. Thus I expect that:

H1: Agreements that are not well predicted by the economic relationship between their members should be more ambitious in scope, and should be signed earlier than expected.

This is a good test of the sequencing argument because the commitments made in agreements should correspond to the benefits that they deliver. Deeper commitments entail greater political costs for governments in terms of the loss of policy space, and so accordingly this cost should be offset by greater gain. If agreements are signed (as per the standard account) in order to liberalize economic exchange between their partners, then it would be intuitive to expect that agreements that are poorly predicted by the economic relationship between members will be less ambitious (since less economically beneficial). If H1 is confirmed, it would suggest that poorly predicted agreements deliver an alternative benefit.

Of course, if PTAs are not economically well-predicted, incentives for both use and enforcement may be lower and therefore the cost of deep agreement may be lower (although not absent) for less well-predicted PTAs. While this is possible, signing up to an ambitious PTA where there is no expectation of honouring its commitments remains puzzling behaviour. Moreover, if there is no intention to honour PTA commitments, we may equally expect the resulting agreement to be shallow. Finding that less well-predicted PTAs are systematically deeper would therefore still suggest that they provide a benefit in line with the theory presented here.

As suggested in the introduction and in the discussion in Section 2, I expect my main hypothesis to be most clearly validated for states that have the strongest preferences over the legal content of the trade regime. I use countries' participation as Third Parties in the WTO's DSU mechanism to identify which states are most active in making their preferences known to the wider membership about how particular issue-areas in international trade are regulated. I use Third Party participation rather than participation as a Complainant, because the latter is strongly predicted by legal capacity, whereas participation as a Third Party is almost costless.<sup>53</sup> I do however distinguish between countries that actively make a Third Party submission, and those that participate simply as observers.

I also have expectations concerning the mechanism at play in sequencing. To the extent that previous agreements represent negotiators' conception of a 'gold standard' in which rules reflect best practice, subsequent agreements are likely to model this. The benefits of sequencing also play out domestically during subsequent negotiations. Having established past practice means that negotiators and governments are able to point to an established precedent in agreement design. By indicating that present regulatory efforts follow in a lineage of established practice, opposition to regulatory efforts may be reduced. This would suggest that states that are likely to sequence should 'ratchet' agreement depth,<sup>54</sup> successively signing more ambitious agreements.

H2: States that take a stronger interest in the systemic implications of WTO rules, as measured by their participation as Third Parties, will be more likely to build successively on agreement depth from one agreement to the other.

## 2.5 Summarizing a theory of sequencing

Reaching international agreement is politically challenging. In some issue-areas, it has proved particularly so, raising the puzzle of how negotiators are able to introduce new rules in these areas. I argue that to better achieve their preferred regulations in new issue-areas, governments sometimes rely on the power of precedent. By first negotiating ambitious agreements with lower value partners where agreement is easier, governments create a precedent for their ideal agreement design. In doing so, governments hope that subsequent agreements with higher-value partners will be easier, because they can invoke precedent in order to reduce public opposition, and because past agreements create a favourable template for future deals. Yet, sequencing is unlikely to be a strategy adopted by all states, and is instead more likely to be a strategy used by states with strong preferences about global trade rules and the legal capacity to act on those preferences. The following sections test this argument empirically.

 $<sup>^{53}</sup>$  Johns and Pelc (2016).

<sup>&</sup>lt;sup>54</sup>Pouliot and Thérien (2015).

## 3 Data and method

I use a gravity dataset built at the dyad-year level. I use a directed dataset in which each observation corresponds to a country-pair (dyad) for a single year. Because my theory is based on individual state calculations, each country-pair appears twice. This allows me to analyze the pair's entry into a PTA in the context of both countries' other agreements. This section describes the data and the empirical approach used to test my hypotheses.

#### 3.1 Data

The gravity dataset is constructed using annual import and export figures from the IMF's Direction of Trade Statistics (DOTS), which range from 1950 to 2015.<sup>55</sup> For data on GDP, GDP per-capita and other country-level economic variables I use the World Development Indicators (WDI) from the World Bank.<sup>56</sup> Distance and other geographic measures are from the CEPII database;<sup>57</sup> regime type is measured using Polity 4;<sup>58</sup> and data on PTAs uses the Design of Trade Agreements (DESTA) dataset.<sup>59</sup> Following Mansfield and Milner,<sup>60</sup> I use a gravity model that includes political as well as economic variables. Data on countries' alliances is from version 4.1 of the Correlates of War alliance data;<sup>61</sup> and data on disputes is from version 4.1 of the Militarized Interstate Disputes (MID) data, also from the Correlates of War project.<sup>62</sup> I also include a measure of global economic business cycles,<sup>63</sup> measured by the year-to-year change in global economic output. Data on countries' participation in the WTO's DSU is retrieved from the country pages of the WTO website,<sup>64</sup> and is supplemented by additional data on whether Third Parties make their position on a given issue-area known, or whether they participate silently.<sup>65</sup>

 $<sup>^{55} \</sup>rm http://data.imf.org/dot$ 

<sup>&</sup>lt;sup>56</sup>http://data.worldbank.org/data-catalog/world-development-indicators

<sup>&</sup>lt;sup>57</sup>Mayer and Zignago (2011).

<sup>&</sup>lt;sup>58</sup>Marshall, Gurr, and Jaggers (2016).

<sup>&</sup>lt;sup>59</sup>Dür, Baccini, and Elsig (2014).

 $<sup>^{60}</sup>$  Mansfield and Milner (2012).

 $<sup>^{61}</sup>$ Gibler (2009).

 $<sup>^{62}</sup>$ Palmer et al. (2015).

 $<sup>^{63}</sup>$ Mansfield and Milner (2012), 75.

<sup>&</sup>lt;sup>64</sup>https://www.wto.org.

 $<sup>^{65}\</sup>mathrm{I}$  am grateful to Krzysztof Pelc for sharing this data.

## 3.2 Analytical approach

The main test of my hypotheses leverages variation in the depth of trade agreements, variation in the order in which countries sign agreements, and variation in the extent to which countries are predicted to enter into a PTA. The first stage in this approach involves establishing baseline predictions for the existence of a bilateral PTA for a given dyad. For this, I estimate a logit model using economic and political variables, which approximates the approach of Baier and coauthors, and Mansfield and Milner.<sup>66</sup> In a first test of the argument, I compare the factors that predict PTA entry with those that predict entry into an innovative PTA–one that breaks with past practice. I operationalize this using DESTA's 'Index' measure of agreement depth. I code an innovative PTA as '1' when it is the first PTA signed by a state at a given level of depth. Other PTAs are signed '0'.

I then return to the predictive model of PTA entry. Using this model, I calculate predictive probabilities for the entry into a PTA for each directed dyad-year. From this I derive a binary variable, coded 1 if countries are predicted to enter into a PTA, and 0 if not. Comparing this to actual PTA entry, I then identify signed, but non-predicted, PTAs as instances of 'excessive bilaterialism'.<sup>67</sup> These are cases where states enter into a PTA despite it being poorly predicted by economic and political variables. As Baier, Bergstrand and Mariutto discuss, there are differing approaches to establishing whether or not a PTA is well-predicted. Earlier approaches commonly use a cut-off of p = 0.5.<sup>68</sup> Yet, PTAs are rare events. In my dataset, I record 6,898 instances of dyadic PTA signature from a possible 628,732 dyad-year observations used in my main logit model.<sup>69</sup> This amounts to 1.10% of observations. Establishing a predicted probability of 0.5 as a cut-off would misleadingly inflate the number of non-PTAs (0s) correctly predicted, inflate instances of 'excessive bilaterialism', and correctly predict very few PTA pairings.

Accordingly, I follow Baier, Bergstrand and Mariutto and use the distribution of PTAs as a guide to the predicted probability. Yet, I also cannot simply create a time-invariant threshold of p = 0.011. While this would correspond to the baseline probability of dyadic PTA signature

<sup>&</sup>lt;sup>66</sup>Baier, Bergstrand, and Mariutto (2014) and Mansfield and Milner (2012).

<sup>&</sup>lt;sup>67</sup>Baier and Bergstrand (2004).

<sup>&</sup>lt;sup>68</sup>Baier, Bergstrand, and Mariutto (2014), pp.37-40. See Baier and Bergstrand (2004); Egger and Larch (2008); Chen and Joshi (2010).

<sup>&</sup>lt;sup>69</sup>The number of PTAs in the dataset is far fewer; a single PTA appears in the dataset once for each directed-dyad signatory.

across all years, it would inflate instances of 'excessive bilateralism' in earlier years given that the number of PTAs has increased over time. I establish a time-variant threshold by examining the number of instances of a dyad entering into a PTA in a given year as a proportion of the number of dyads in that year. When running the model for all states, this approach correctly predicts 4,539 of 6,898 (65.8%) entries into a PTA, and identifies 2,359 of 6,898 (34.2%) instances of 'excessive bilateralism'. For subsequent analysis, the main result of this analysis is the EXCESSIVE BILATERALISM variable, which identifies 2,359 PTA signatures that are *under*-predicted based on economic and political variables. The theory developed above suggests that such under-predicted PTAs should be over-represented in those agreements where establishing precedent in agreement design is an additional motivation for signature. Counterintuitively then, I expect these underpredicted PTAs to be *more ambitious* and to be *signed sooner*. To test this hypothesis, I use EXCESSIVE BILATERALISM as a dummy independent variable, and run variations on two different OLS models estimating AGREEMENT DEPTH and AGREEMENT ORDER. In order to avoid omitted variable bias, I include the first-stage regression variables in the second stage regression.

The theory predicts that states that have the strongest preferences over the rules of the global trade regime–and the legal capacity to advance them–should be particularly likely to sign under-predicted PTAs with the goal of establishing precedents in agreement design. I collect data on country participation in the WTO's Dispute Settlement Understanding (DSU) and count each instance of country participation either as a DSU Complainant, Respondent or Third Party. I expect that states that elect to participate as Third Parties in WTO disputes demonstrate a stronger interest in the legal content of the global trade regime. While this is also captured by states' participation as Complainants, the latter is driven in large part by countries' legal capacity. Moreover, certain countries–particularly rising powers such as India–have strong preferences about global trade rules, but have historically been less active in multilateral institutions like the WTO.

Using Third Party submissions more clearly captures countries' interest in the systemic impact of WTO rulings, and does not bias the selection towards countries with an historically higher standing in the WTO. Yet, because the cost of participation as a Third Party is so low,<sup>70</sup> I distinguish between countries that choose to participate without making a submission about the case at hand, and those that do make a submission. Because this latter data does not cover all

 $<sup>^{70}</sup>$ Johns and Pelc (2016).

cases to present day, I take the proportion of disputes in which a country made a submission over the total number of disputes in which that country has appeared as a Third Party, and multiply this ratio by the total number of disputes in which a country has appeared as a Third Party. I identify the top quartile of the resulting distribution as HIGH DSU states, with all other states coded as LOW DSU states. I also identify all European Union states as HIGH DSU, since the EU now acts as a unified actor in trade.

I assume that behaviour in the DSU is indicative of long-standing country preferences, and therefore is relatively time-invariant. Because it is possible that factors predicting PTA existence might differ systematically for these two groups of states, I identify 'excessive' PTAs for each group separately, using the approach outlined above. In other words, adopting a split-sample approach allows me to account for unobservable heterogeneity between high- and low-DSU states. I show that when restricting the sample to PTAs signed by these states, EXCESSIVE BILATERALISM better predicts both AGREEMENT DEPTH and earlier AGREEMENT ORDER.

Subsequently, I test the mechanism behind precedent. I first turn to the practice of states that participate most as Third Parties in the DSU. I assess the extent to which the depth of countries' previous PTAs are a good predictor of subsequent agreement depth. If states are attempting to establish precedent, entry into PTAs should be an effort in establishing and reinforcing stable expectations about agreement design. I expect previous PTA design to predict present PTA design for those same states that are particularly active as Third Parties in the DSU to a greater extent than other states. To test this, I estimate an OLS model in which the dependent variable is depth, and the main explanatory variable is the depth of the immediately preceding PTA. The results show that the depth of agreements signed by HIGH DSU states is positively correlated over time, supporting the idea that these states would progressively ratchet agreement depth.

If PTAs that are less well-predicted offer states opportunities to increase the ambition of their agreements, these 'excessive' PTAs should also be associated with larger increases in depth, relative to previous agreements, than other PTAs. I test this by measuring the difference in depth between a PTA signed in time t and the average depth of the three preceding PTAs. For HIGH DSU states, 'excessive' PTAs are associated with a greater increase in depth, which supports the idea that states might use these agreements to experiment in agreement design with more ambitious clauses.

One concern with the approach taken here is that there may be a substantial difference in the sort of agreements negotiated by the two groups of states identified by my HIGH DSU variable. This would be problematic if it resulted in limited variation in depth for either group. One might also be concerned with issues of selection bias, for instance if there are underlying reasons why states are both low-DSU and sign low-depth agreements. If selection bias is a concern, the traditional natural trading partner and comparative advantage arguments at the base of the (economic) gravity model might not predict PTAs, which would bias the identification strategy at the heart of my empirical approach. These are important concerns. Fortunately, kernel density plots of depth for both groups (Figure 1) show that there is variation in depth for both high- and low-DSU states.



Figure 1: Distribution of Depth, high and lower DSU states

Moreover, the argument made here is not a causal one linking countries' participation in the DSU to the depth of the agreements they sign. This participation is one indication of countries' preferences about global trade rules. If (for instance) exporting commodities that are not frequently the subject of claims through the WTO makes states both less likely to sign ambitious agreements, and less likely to participate as Third Parties in WTO disputes, this does not necessarily present a methodological problem as one might expect these states to expend fewer resources clarifying the details of trade rules. Nevertheless, the concern about unobserved heterogeneity between highand low-DSU groups is one of the motivations for subsetting the data at the first stage based on countries' DSU participation. By doing this, the analysis asks whether the PTAs that are under-predicted by economic and political variables *for these states* are correlated with depth.

To address concerns about deviations from natural trading partner patters biasing the identification strategy, I also run alternative model specifications in which I include ten-year lagged exports in the first (and second) stage regressions. Because historical trade data is readily available for the 20th century, this approach can be implemented with minimal data loss for early observations.

A final concern with the approach taken here is that DESTA data may be a little coarse for examining a sequencing process at play, since the 'depth' variables in DESTA speak to the agreement as a whole, while sequencing may be particularly relevant for specific issue-areas such as foreign investment, or intellectual property. To address this concern I present some qualitative evidence from an under-predicted PTA: the trade component of the European Union-Chile Association Agreement. Chile is a relatively unimportant trade partner for the EU, and a study commissioned by the European Parliament suggests that there is little economic rationale for updating the agreement. Commentators have suggested however that the agreement may be seen as an opportunity to consolidate the EU's approach to trade agreements, to lock-in policy shifts (such as the EU's new approach to regulating foreign investment), and to experiment with new design elements (such as those covering Trade and Gender) that could be used in subsequent agreements. I compare the EU's approach with that of New Zealand in its negotiations to upgrade its PTA with China. Although China is New Zealand's primary trading partner, in that case as well, New Zealand officials appear to view the upgrade negotiations as a way of influencing concurrent negotiations on a 'mega-regional' Asian-Pacific PTA-the Regional Comprehensive Economic Partnership (RCEP), of which China is the largest negotiating party. This qualitative evidence further supports the argument that states sign agreements with an eye to future negotiations.

## 4 Sequencing: quantitative evidence

Before presenting the results of the regressions, it is useful to illustrate the notion of sequencing graphically. Figure 2 displays the evolution of agreement depth over time, for all states. The general trend has been for agreements to become more comprehensive. This is true for those states that have been less active as Third Parties in the WTO's DSU and those that have been most active, but the latter group's agreements have increased in depth more rapidly.



Figure 2: The evolution of agreements over time

Note: Figure displays the evolution of depth over time for all states. Agreements involving states most active in the WTO's DSU as Third Parties have a hollow orange circle. Agreements with states less active in the DSU as Third Parties have a solid blue circle. Overlapping circles either indicate joint membership of high- and low-DSU states, or multiple PTAs at a given level of depth in a single year.

Because it is difficult to display sequencing in the aggregate, Figure 3 contrasts the pattern of agreements signed by Chile with those signed by Venezuela. Chile is a relatively small, open economy and is vocal as a Third Party in the DSU. Chile has also been actively signing trade agreements, which are increasingly ambitious. For much of the past few decades, Venezuela has a comparable GDP and GDP per capita to Chile (although this is largely due to petroleum production). Like Chile, Venezuela has signed many PTAs (27 to Chile's 35 recorded in the DESTA dataset). Unlike Chile, Venezuela has shown little appetite for signing deep agreements. While Chile has progressively signed more ambitious PTAs, Venezuela is not a party to any PTA with a depth index above 2, meaning that its PTAs are limited to regulating two issues.



Figure 3: Comparing sequencing: Chile and Venezuela

Note: Figure 2 represents the relationship between GDP and level of agreement depth through time for Chile and Venezuela. Chile is on the left; Venezuela is on the right.

In Figure 3, the size of Country B's economy relative to that of Country A (at the time of agreement) is indicated by the size of the point on the graph. A clear pattern of sequencing would consist of the first point within a particular level of depth being smaller than subsequent points; this should be particularly obvious as agreements become more ambitious. In general, a sequencing logic would be indicated by the largest points being situated in the top right of Figure 3. This pattern is far more evident for Chile (left panel) than it is for Venezuela (right panel). For Chile, as agreements become deeper (consider in particular those that have a depth of above 4 or 5), it seems more likely that an agreement with a large state will be preceded by a similarly deep agreement with a smaller state (note that in Figure 3, agreements with names are those that are

the first to be signed at a particular level of depth). At a depth level of 6 (out of a possible 7), the Chile-Mexico agreement preceded both Chile-US and Chile-EC, <sup>71</sup> while at depth level of 7, the Chile-Korea agreement preceded Chile-Australia and Chile-Japan, as well as the Trans-Pacific Partnership. Moreover, the relative size of PTA partners appears to be increasing as Chile signs progressively deeper agreements.

Contrast this with Venezuela. Venezuela has signed many PTAs, but they tend to be shallow. There is little evidence that Venezuela is sequencing by signing agreements with smaller countries first. Indeed, when Venezuela first signed a marginally more comprehensive agreement (level 1 as opposed to level 0), it did so with Argentina, a country that is larger than most other countries with which Venezuela has signed agreements of depth level 1. Unlike for Chile, we do not observe relatively larger partners coming later and in more ambitious PTAs. I now test the argument in more general terms.

#### 4.1 With whom do states innovate?

The first test of the argument is the simplest, and follows from the graphical comparison of Chile and Venezuela's experience with PTAs. If states sequence agreements, signing first with less important partners in order to shape subsequent negotiations, then I expect that the factors accounting for PTA signature in general will be reversed when looking at innovative agreements. Namely, I expect trade to correlate positively with PTA signature, but negatively with innovative agreements. Similarly, while previous research suggests that states that are jointly large and similar in GPD will be more likely to sign agreements, I expect that joint GDP should be relatively smaller for innovative agreements, and more importantly, that innovative agreements will be more likely where GDP differences are larger.

Table 1 tests these expectations. Column 1 presents the results from a gravity model with political and economic variables, where the dependent variable is entry into a reciprocal PTA. As expected, trade (lagged by ten years to account for endogeneity) positively predicts PTA entry, and while joint GDP size is not statistically significant, GDP difference negatively correlates with PTA entry, indicating that states that are more similar in size are more likely to enter into a PTA.

<sup>&</sup>lt;sup>71</sup>Canada-Chile also preceded these important agreements, although it is a slightly less comprehensive agreement at depth level 5.

Dependent Variable	PTA entry		Innovat	ive PTA
Model	(1)	(2)	(3)	(4)
	Base	De-trended	Base	De-trended
Exports (logged, t-10)	$0.034^{***}$	$0.034^{***}$	-0.019***	-0.018***
	(0.003)	(0.003)	(0.007)	(0.006)
GDP sum $(t-5)$	-0.011	-0.015	-0.125***	-0.123***
CDP difference († 5)	(0.010) 0.140***	(0.010) 0.140***	(0.023)	(0.020)
GD1 difference (t-5)	(0.012)	(0.011)	(0.024)	(0.024)
Distance (logged)	-0.404***	-0.403***	0.196***	0.222***
	(0.026)	(0.026)	(0.058)	(0.068)
Remoteness	$1.435^{***}$	$1.378^{***}$	-0.767**	-0.733**
	(0.181)	(0.180)	(0.380)	(0.363)
Same continent	$-10.662^{***}$	$-10.187^{***}$	$5.525^{*}$	$5.386^{\circ}$
Previous PTAs (own t-5)	(1.505) 0.013***	(1.498) 0.013***	-0.025***	(3.027)
	(0.001)	(0.001)	(0.003)	(0.003)
Previous PTAs (partner's, t-5)	0.013***	0.013***	0.010***	0.008***
	(0.001)	(0.001)	(0.002)	(0.002)
Previous PTAs (ROW, t-5)	0.004***	0.007***	-0.017***	0.001
	(0.001)	(0.001)	(0.006)	(0.002)
Previous PTAs (ROW, t-5, squared)	-0.000	-0.000	-0.000	$-0.000^{-0.00}$
Alliance	$0.284^{***}$	$0.271^{***}$	-0.427***	-0.493***
	(0.056)	(0.056)	(0.084)	(0.087)
Post-Cold War	0.973***		-0.861	
	(0.115)		(0.607)	
Previous conflict	-0.137	-0.115	0.041	0.092
CWD sharms	(0.165)	(0.165)	(0.362)	(0.345)
GWF change	$(0.000^{-0.000})$	$(0.003^{+++})$	(0.040)	(0.037)
Hegemony	-0.477***	-0.459***	-0.460***	-0.412***
	(0.024)	(0.024)	(0.080)	(0.052)
Polity scores (own)	-0.008***	-0.004*	$0.041^{***}$	$0.047^{***}$
	(0.003)	(0.003)	(0.008)	(0.007)
Polity scores (partner)	$-0.005^{**}$	-0.002	(0.005)	$0.011^{*}$
Both in CATT	(0.003)	(0.003)	(0.007)	(0.000) 0.144*
	(0.047)	(0.048)	(0.072)	(0.077)
Both in WTO	0.364***	0.266***	$0.356^{*}$	0.088
	(0.064)	(0.064)	(0.205)	(0.165)
Colonial relationship post-1945	-0.271	-0.286	-0.391	-0.476
X/	(0.245)	(0.247)	(0.471)	(0.605)
rear		$(0.058^{+++})$		$(0.000^{-1.1})$
Constant	7.629	-110.790***	$-78.594^{***}$	$-125.991^{***}$
	(6.457)	(19.616)	(18.351)	(45.991)
Cubic splines	Yes	No	Yes	No
Continent dummies (own and partner)	Yes	Yes	Yes	Yes
Bootstrapped errors	NO	NO	res	res
Observations	561.878	561.878	6.559	6.559
Pseudo R-squared	0.187	0.181	0.182	0.167
Chi-squared	7879	6784	1214	1359
No. clusters	10720	10720	2120	2120
No. missed reps			0	0
no. replications			100	100

Table 1: PTA entry and innovative PTA entry

Cells contain logit regression estimates with robust standard errors clustered at the undirected dyad. Binary DV is PTA entry (columns (1) and (2)) and Innovative PTA entry (columns (3) and (4)). \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01 Contrast these results from those in Column 3. This model retains the same specifications as the full model (Column 1), but the sample is restricted to observations of PTA-entry. The binary dependent variable is the signature of a PTA where that PTA is the first to be signed by Country A at a given level of depth, using DESTA's Index measure of depth. At each new level of depth (where this measures the number of issue-areas covered by a PTA, ranging from 0 to 7) the first PTA to be signed is coded '1', and all subsequent PTAs are coded '0'. In Column 3, the signs on the coefficients relating to country size and economic importance switch. Innovative PTAs-those that cover a novel issue-area-are signed with partners where trade is *less* important, where the difference in GDP is *larger*, and where joint GDP is *smaller*. Note, that the baseline here is other PTAs: the comparison is between PTAs that break new ground, and those that follow at the same level of depth.

Since PTAs have been increasing gradually in depth, innovative PTAs (those representing a break with past practice with respect to the number of issues covered) are not only signed in earlier years. However, there is a slight negative correlation between innovative PTAs and time, while trade correlates positively with time. While Models 1 and 3 already include a cubic spline to account for time trends, in Models 2 and 4 I de-trend the main explanatory variables (lagged exports, lagged joint GDP, and lagged GDP difference). I regress these variables, respectively, on time, and use the residuals obtained in the place of each variable. I also include a YEAR variable, and omit the POST-COLD WAR variable and the spline function, which correlate with time. The results remain substantively unchanged. States appear to sign innovative agreements– those covering new issue-areas for the first time–with partners with whom they trade *less*, with whom joint GDP is *smaller*, and with whom the difference in GDP is *greater*, as compared with other agreements.

#### 4.2 Excessive bilateralism and agreement depth

I then follow the two-stage regression approach explained in Section 3. Table 2 presents the results of the gravity model. The binary outcome variable PTA is coded 1 when states A and B enter a PTA and 0 otherwise. Columns 1-3 present the results without ten-year lagged exports, while Columns 4-6 present the results with lagged exports. As indicated in the table, I split the sample into three groups: all states (Columns 1 and 4), High-DSU (Columns 2 and 5), and Low-DSU (Columns 3 and 6). I exclude non-reciprocal agreements aimed at development assistance, such as the Lomé and Yaoundé agreements.

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Model       All states       Active sid 1 arty       Less sid 1 arty       Trade       Trade       Trade         Distance (logged) $-0.543^{***}$ $-0.258^{***}$ $-0.662^{***}$ $-0.404^{***}$ $-0.261^{***}$ $-0.555^{***}$ Remoteness $0.682^{***}$ $0.495^{***}$ $1.128^{***}$ $1.435^{***}$ $0.433$ $2.661^{***}$ $0.403$ $0.225$ $0.403$ $0.225$ $0.403$ $0.225$ $0.225^{***}$ $-10.662^{***}$ $-2.425$ $-17.214^{***}$ $1.096$ $0.025^{***}$ $0.0011$ $0.002^{**}$ $0.011$
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GDP sum (t-5) $0.025^{***}$ $0.040^{***}$ $0.025^{***}$ $-0.011$ $-0.012$ $0.029^{**}$ (0.007)(0.011)(0.009)(0.010)(0.016)(0.013)
(0.007) $(0.011)$ $(0.009)$ $(0.010)$ $(0.016)$ $(0.013)$
GDP difference (t-5) $-0.126^{***}$ $-0.140^{***}$ $-0.132^{***}$ $-0.140^{***}$ $-0.128^{***}$ $-0.132^{***}$
(0.012) $(0.014)$ $(0.015)$ $(0.012)$ $(0.016)$ $(0.015)$
Previous PTAs (own, t-5) 0.014*** 0.007*** 0.019*** 0.013*** 0.005*** 0.023***
(0.001) $(0.001)$ $(0.003)$ $(0.001)$ $(0.001)$ $(0.003)$
Previous PTAs (partner's, t-5) 0.014*** 0.004*** 0.029*** 0.013*** 0.006*** 0.020***
(0.001) $(0.001)$ $(0.002)$ $(0.001)$ $(0.001)$ $(0.002)$
Previous PTAs (ROW, t-5) 0.001* 0.004*** 0.001 0.004*** 0.019*** 0.019***
(0.001) $(0.001)$ $(0.001)$ $(0.001)$ $(0.002)$ $(0.002)$
Previous PTAs (ROW, t-5, squared) -0.000*** -0.000*** -0.000*** -0.000*** -0.000*** -0.000***
(0.000) $(0.000)$ $(0.000)$ $(0.000)$ $(0.000)$ $(0.000)$ $(0.000)$
Alliance $0.302^{***}$ $0.105$ $0.400^{***}$ $0.284^{***}$ $0.057$ $0.538^{***}$
(0.052) $(0.071)$ $(0.068)$ $(0.056)$ $(0.077)$ $(0.076)$
Post-Cold War 1.436*** 0.237** 1.791*** 0.973*** -0.027 1.197***
(0.077) $(0.105)$ $(0.092)$ $(0.115)$ $(0.202)$ $(0.132)$
Previous conflict -0.325* 0.071 -0.490*** -0.137 0.206 -0.330*
(0.177) $(0.359)$ $(0.190)$ $(0.165)$ $(0.359)$ $(0.170)$
GWP change $-0.079^{***}$ $0.125^{***}$ $-0.232^{***}$ $-0.066^{***}$ $0.130^{***}$ $-0.226^{***}$
(0.013) $(0.019)$ $(0.015)$ $(0.013)$ $(0.019)$ $(0.016)$
Hegemony $-0.403^{***}$ $-0.304^{***}$ $-0.418^{***}$ $-0.477^{***}$ $-0.413^{***}$ $-0.514^{***}$
(0.021) $(0.028)$ $(0.025)$ $(0.024)$ $(0.035)$ $(0.028)$
Polity scores (own) 0.005** 0.024*** 0.001 -0.008*** 0.003 -0.003
(0.002) $(0.008)$ $(0.003)$ $(0.003)$ $(0.008)$ $(0.003)$
Polity scores (partner) 0.005** 0.065*** -0.013*** -0.005** 0.048*** -0.021***
(0.002) $(0.006)$ $(0.003)$ $(0.003)$ $(0.006)$ $(0.003)$
Both in GATT -0.005 -0.034 0.064 -0.064 0.125** -0.088
(0.043) $(0.056)$ $(0.051)$ $(0.047)$ $(0.062)$ $(0.056)$
Both in WTO $0.393^{***}$ $0.598^{***}$ $0.116$ $0.364^{***}$ $0.297^{***}$ $0.155^{*}$
(0.059) $(0.093)$ $(0.074)$ $(0.064)$ $(0.096)$ $(0.082)$
Colonial relationship -0.125 -0.257 -0.032 -0.271 -0.229 -0.237
(0.257) $(0.329)$ $(0.226)$ $(0.245)$ $(0.308)$ $(0.229)$
Exports (logged, t-10) 0.034*** 0.040*** 0.021***
(0.003) $(0.009)$ $(0.004)$
Constant $3.445^{***}$ $-2.054^{**}$ $4.816^{***}$ $7.629$ $29.481^{***}$ $10.643$
(0.491) $(0.815)$ $(0.590)$ $(6.457)$ $(8.694)$ $(7.587)$
Cubic Spline function No No No Yes Yes Yes
Continent dummies No No No Yes Yes Yes
(own and partner's)
Observations 628,732 194,296 434,436 561,878 183,542 378,336
Pseudo R-squared 0.185 0.168 0.227 0.187 0.180 0.234

Table 2: Predicting entry into a Preferential Trade Agreement

Cells contain logit regression estimates with robust standard errors clustered at the undirected dyad. Binary DV is entry into a reciprocal PTA between states A and B.

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

I generate predicted probabilities of the existence of a PTA using the approach explained

above.<sup>72</sup> I generate an 'excessive bilateralism' for each of the six models above. Table 3 presents the results for Model 1, using the entire sample of states. In the case of PTAs for all states, there are 2,359 dyad-year observations where a PTA that was not economically or politically predicted was signed. I use the observations falling in the bottom-left quadrant as the basis for a bilateral variable, EXCESSIVE BILATERALISM. I then use this as an independent variable in subsequent regression analysis. Table 4 presents the results. Using the 'rasch' measure of depth coded by DESTA–which scores agreements based on an overall assessment of cooperation in a range of issue-areas–I find that under-predicted PTAs are *positively* correlated with depth for High-DSU states.

Table 3: PTAs: actual and predicted (all states)

	Predicted PTA signature				
PTA signed	Not predicted	Predicted	Total		
No PTA	381,925	239,909	621,834		
PTA signed	2,359	4,539	6,898		
Total	384,284	$244,\!448$	628,732		
Pearson Chi-sq $(1) = 2.1e+03$		$\mathbf{Pr} = 0.000$	Cramer's $\mathbf{V} = 0.0582$		

This table presents results where the predictive models from Table 2, with the addition only of the EXCESSIVE BILATERALISM variable, are used to predict PTA depth. The results in these first columns provide strong initial support of my hypothesis that less well-predicted PTAs should correlate positively with agreement depth for states that care more intensely about the systemic impact of global trade rules. Models 1-3 use the baseline model specification from table 2, in which I do not include lagged exports. All models have country-year fixed effects.

In Column 1, there is no correlation between excessive bilateralism and depth when looking at all states. Columns 2 and 3 retain the specification of column 1, but subset the observations based on Country A's level of activity as a Third Party the WTO's DSU. I use the EXCESSIVE BILATERALISM variable that corresponds with the relevant results from the first-stage regression presented in Table 2. I expect that states that are more active as Third Parties are more likely to sequence. This is borne out in the results. Column 2 shows however that for states that are most active as Third Parties in the DSU, there is a positive correlation between excessive bilateralism and

 $<sup>^{72}</sup>$ I run additional models using time-series structured data (not reported), but even using an adjusted threshold probability, this results in poorly fitting predicted probabilities: the model under-predicts PTAs and therefore incorrectly results in a supermajority of 'excessive' PTAs.

agreement depth; this result is significant at the 95% confidence interval. This same relationship is reversed for states that are less active as Third Parties in the DSU (Column 3). When including lagged exports in the first and second stage to account for trading relationships that deviate from expected natural trading partner patterns (Columns 4-6), the results are sharpened for states more active as Third Parties, and somewhat reduced in substantive terms for states less active as Third Parties. Both results are significant at the 99% confidence interval.

As these are the results of OLS regressions, we can interpret the coefficient directly. In Models 4 and 5, excessive bilateralism is associated with an increase in the Rasch Depth of a PTA of .088 for High-DSU states, and an decrease of 0.093 for Low-DSU states, once other factors are accounted for. The Rasch measure of PTA depth ranges from -1.73 to 1.89 (standard deviation of 0.982). While the substantive impact of this result is by no means huge, the difference between states that are more- and less-active as Third Parties in the DSU is striking.

Table 4 supports the first part of my main hypothesis (H1). Excessive bilateralism is associated with *more ambitious PTAs* for states that have more intense preferences about global trade rules. I now turn to the second part of this hypothesis, that excessive bilateralism is associated with earlier signature date.

#### 4.3 Signature order

In Table 5, the dependent variable is AGREEMENT ORDER, which is the order in which states sign agreements (thus, the first PTA signed by a given country is coded 1, the second coded 2, and so forth). So that the results are not biased by PTAs that were signed earlier (and which therefore have more potential observations with their order established), each observation is a dyad-year in which a PTA was entered into. If dyads with EXCESSIVE BILATERALISM are the result of strategic PTAs, I expect these to be associated with an earlier signature date, and for EXCESSIVE BILATERALISM to have a *negative* effect on agreement order. In these models, I exclude some variables from the first-stage regressions that are clearly endogenous to signature order: the number of own- and partner-country PTAs, the number of PTAs signed by the ROW, and the cubic spline function. For all models, I use subsetted samples as in the previous analysis. Models 1 and 2 are a base specification, and Models 3-6 use country fixed effects.

Here, the results are a little more mixed. In Model 1 and 2 EXCESSIVE BILATERALISM is

	(1)	(2)	(3)	(4)	(5)	(6)
Model	All states	More active	Less-active	All states	More active	Less-active
	no trade	no trade	no trade	Trade	Trade	no trade
Excessive hilateralism	-0.032	0 064**	-0 146***	-0.005	0 088***	-0 093***
	(0.022)	(0.030)	(0.029)	(0.024)	(0.027)	(0.027)
Distance (logged)	0.017	0.040***	0.018	0.025**	0.001	0.025
	(0.012)	(0.013)	(0.018)	(0.012)	(0.013)	(0.016)
Remoteness	-0.668***	-0.351***	-0.509***	-0.144	0.092	0.383**
Course courting out	(0.094)	(0.125)	(0.158)	(0.109)	(0.199)	(0.151)
Same continent	(0.766)	(1.039)	(1.304)	(0.907)	(1.685)	(1, 239)
GDP sum (logged, t-5)	0.033***	0.001	0.020***	0.025***	0.021**	0.021***
	(0.005)	(0.008)	(0.006)	(0.005)	(0.009)	(0.007)
GDP difference (logged, t-5)	0.019***	0.016**	0.018**	0.017***	0.011**	0.017**
Draniana DTA - (anna + 5)	(0.006)	(0.007)	(0.009)	(0.006)	(0.005)	(0.008)
Previous PIAs (own, t-5)	-0.001	(0.001)	(0.006)	-0.002	-0.000	(0.007)
Previous PTAs (partner, t-5)	0.001***	0.001	0.002**	-0.000	-0.001**	-0.001
	(0.000)	(0.000)	(0.001)	(0.000)	(0.001)	(0.001)
Previous PTAs (ROW, t-5)	0.001	0.022**	-0.014	0.006	$0.026^{*}$	-0.010
	(0.008)	(0.009)	(0.016)	(0.010)	(0.015)	(0.016)
Previous PTAs (ROW, t-5, squared)	-0.000	-0.000***	-0.000	-0.000	-0.000	-0.000
Alliance	-0.186***	0.013	-0.345***	$-0.152^{***}$	-0.030	-0.269***
	(0.022)	(0.019)	(0.028)	(0.021)	(0.022)	(0.029)
Post-Cold War	9.992***	-0.711	32.847***	-746.989	515.637	-890.290
	(2.904)	(4.042)	(4.843)	(6,978.490)	(869.173)	(15710859.110)
Previous conflict	(0.135)	-0.032	$0.195^{**}$	(0.157)	(0.046)	$0.207^{***}$
GWP change	0.796	-0.673	6 161***	0.034	0.922***	7 003
e mi enange	(0.650)	(1.458)	(1.303)	(0.279)	(0.252)	(536, 555.562)
Hegemony	0.620***	0.646***	1.373***	0.523	1.924***	-0.543
	(0.124)	(0.176)	(0.246)	(1.344)	(0.566)	(.)
Polity scores (own)	(0.005)	0.007	0.004	(0.002)	(0.000)	(0.004)
Polity scores (partner)	0.003)	0.034***	0.015***	0.003)	0.015***	0.003)
Fonty scores (partner)	(0.001)	(0.004)	(0.002)	(0.001)	(0.005)	(0.002)
Both in GATT	0.004	0.040	0.017	0.040**	$0.062^{*}$	0.042**
	(0.017)	(0.030)	(0.022)	(0.019)	(0.034)	(0.021)
Both in WTO	$0.337^{***}$	0.173***	0.340***	$0.315^{***}$	0.137**	0.310***
Colonial relationship post-1945	(0.053)	(0.064)	0.070)	(0.063) -0.067	(0.058)	0.068)
Colonial relationship post 1510	(0.021)	(0.087)	(0.100)	(0.094)	(0.094)	(0.092)
Exports (logged, t-10)	( )	· · · ·	× /	-0.002	-0.003	-0.001
				(0.002)	(0.003)	(0.002)
Continent dummy (own and partner)	No	No	No	Yes	Yes	Yes
Spline function	No	No	No	Yes	Yes	Yes
Fixed effects	Country; Year	Country; Year	Country; Year	Country; Year	Country; Year	Country; Year
Bootstrapped Ses	Yes	Yes	Yes	Yes	Yes	No
Constant	-16.395***	-10.090	-55.938***	1,036.604	-161.480	-5,271.428
	(4.702)	(8.496)	(10.479)	(9,162.141)	(1,196.103)	(.)
Observations	6,127	2.345	3,782	5,809	2,276	3,533
R-squared	0.872	0.854	0.841	0.877	0.878	0.850
N_clust	2129	1175	1700	2010	1130	1596
No. missed reps	903	912	926	950	985	
No. replications	97	88	74	50	15	

Table 4: Excessive bilateralism and agreement depth

Cells contain OLS regression estimates with standard errors clustered at the undirected dyad. Models 1-5 have bootstrapped standard errors (1000 reps); model 6 has robust standard errors. DV is depth of a PTA between A and B. EXCESSIVE BILATERALISM variable calculated separately for each sample. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Dependent Variable: Agreement order						
Model	(1) Active 3rd Party	(2) Less-active 3rd Party	(3) Active 3rd Party FE	(4) Less-active 3rd Party FE	(5) Active 3rd Party FE; post-2000	(6) Less-active 3rd Party FE; post-2000
Excessive bilateralism	$-7.063^{***}$ $(1.288)$	$-1.166^{***}$ (0.357)	$0.955^{st}$ $(0.532)$	$-1.079^{***}$ (0.182)	$-0.702^{***}$ $(0.213)$	-0.029 (0.198)
Distance (logged)	-2.001**	0.225	-0.948***	0.218**	0.012	-0.359**
Remoteness	(0.846) -7.822 (8.401)	(0.245) -5.457*** (1.406)	(0.347) 4.499 (4.805)	(0.101) -3.444*** (0.800)	(0.090) -0.281 (1.204)	(0.164) -2.956*** (0.850)
Same continent	(3.249 (71.192)	40.488*** (12.096)	(4.305) -36.369 (40.175)	26.912*** (6.523)	(1.204) 1.722 (10.156)	23.772*** (6.901)
GDP sum (logged, t-5)	3.584*** (0.243)	$0.554^{***}$ (0.068)	$1.491^{***}$ (0.103)	0.581*** (0.022)	0.530*** (0.040)	0.235*** (0.044)
GDP difference (logged, t-5)	3.695*** (0.289)	-0.288** (0.120)	0.783*** (0.114)	-0.170*** (0.050)	0.012 (0.052)	-0.189*** (0.042)
Alliance	-1.654* (0.977)	1.327*** (0.389)	-1.899*** (0.458)	-0.346* (0.200)	-0.282 (0.199)	-0.747*** (0.262)
Previous conflict	-3.345 (4.465)	-0.599 (1.075)	-3.032 (2.988)	-0.326 (0.442)	0.124 (0.838)	-0.241 (0.387)
GWP change	-0.777***	0.412***	-0.807***	-0.194***	-0.744***	-0.620***
Hegemony	-0.811***	-1.796***	-2.509***	-0.894***	-2.330***	-1.396***
Polity scores (own)	(0.254) -0.195	(0.122) 0.046* (0.022)	(0.121) 0.168	(0.083) 0.260*** (0.020)	(0.062) 0.263	-0.014
Polity scores (partner)	(0.135) -0.463*** (0.111)	(0.026) 0.076*** (0.018)	(0.106) 0.140* (0.072)	(0.030) $0.098^{***}$ (0.018)	(0.213) 0.034 (0.021)	(0.052) -0.049*** (0.016)
Both in GATT	0.648	(0.018) 1.373*** (0.248)	-7.662*** (0.667)	-0.098 (0.271)	-2.822*** (0.211)	-0.139 (0.135)
Both in WTO	14.005*** (1.061)	(0.210) 4.459*** (0.465)	23.847*** (0.693)	5.666*** (0.309)	1.960*** (0.436)	0.885** (0.348)
Colonial relationship post-1945	(1.001) 4.369 (3.707)	(0.135) -1.854 (1.361)	-2.116 (2.979)	(0.000) -1.910*** (0.452)	-0.515 (0.532)	(0.010) (0.026) (0.915)
Continent dummy (own and partner)	Yes	Yes	Yes	Yes	Yes	Yes
Bootstrapped SEs	Yes	Yes	Yes	Yes	Yes	Yes
Constant	-142.010*** (12.313)	10.730*** (3.838)	-21.842*** (6.699)	$-6.477^{***}$ (1.555)	38.550*** (2.868)	39.611**** (3.663)
Observations R-squared N_clust No. missed reps	2,711 0.474 1262 0	4,187 0.491 1762 2	2,711 0.921 1262 0	$ \begin{array}{r} 4,187\\0.908\\1762\\42\end{array} $	1,756 0.993 1092 0	1,303 0.980 937 44
No. replications	50	48	50	8	50	6

Table	5.	Evenerivo	hilatoralism	and	arrooment	signatura	order
rable	J.	Excessive	Dilateransin	anu	agreement	signature	oruer

Cells contain OLS regression estimates with robust standard errors clustered at the dyad. DV is the order in which states sign agreements. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

strongly associated with earlier signature date for HIGH DSU states, and less-strongly associated with earlier signature date for LOW DSU states. When introducing country fixed effects (Model 3 and 4) however, the relationship between EXCESSIVE BILATERALISM and AGREEMENT ORDER switches signs for states more active as Third Parties, while remaining negative for states less active as Third Parties (Model 4). It is perhaps unsurprising that these results would be a little unstable–it is implausible that states have a sufficiently long time-horizon that agreements signed in 1980, say, have anything to do with states' intentions in 2015. Moreover, as the motivating example of CETA suggests, the benefits that states derive from setting favourable precedents in agreement design is likely to be ongoing, given that states' regulatory goals evolve over time.

It is more plausible that negotiators have signed agreements within the past decade with

an eye to current developments. New Zealand's Ministry of Foreign Affairs and Trade (MFAT), for instance, notes that the Trans-Pacific Strategic Economic Partnership (TPSEP, also called the P4 agreement) signed between Brunei, Chile, New Zealand and Singapore in 2005, "set the scene for a much more ambitious Pacific Rim agreement" (i.e., the TPP).<sup>73</sup> Accordingly, in columns 5 and 6 I restrict the sample to the period 2005 to 2015. During this period, less well-predicted agreements are associated with earlier signature by HIGH DSU states, but the relationship is not statistically significant for Low DSU states.

So far, I have presented evidence that supports both aspects of H1. I have demonstrated that less well-predicted PTAs tend to be more ambitious, but that this relationship holds only for states that we would expect to have the strongest preferences over the systemic implications of global trade rules, as proxied by their participation as Third Parties in the WTO's DSU. There is also evidence that less well-predicted agreements are signed earlier than better-predicted agreements, which is consistent with the hypothesis that one benefit of these agreements is that they help states to establish precedent for subsequent agreements.

#### 4.4 Testing the sequencing mechanism

I argue sequencing works by establishing expectations about the appropriate content and scope of trade agreements, both to future partners and to domestic groups. Signing with a less important partner may afford states opportunities to experiment with agreement design and to better secure their ideal agreement, before attempting to sign similar agreements with more important partners. I derive two testable implications from this theory. First, those states that have the strongest preferences over the systemic consequences of trade rules, as proxied by their DSU Third Party submissions, will be more likely to *successively* build on past practice, 'ratcheting' the level of ambition in their PTAs. Second, I expect that less well-predicted PTAs should be associated with greater increases in depth relative to previous agreements, as compared with PTAs that are better predicted.

Tables 6 and 7 test these expectations. Table 6 shows that while the depth of Country A's PTAs tends to be positively correlated with that of their immediately preceding PTA for more

<sup>&</sup>lt;sup>73</sup>New Zealand MFAT. 'Trans-Pacific Strategic Economic Partnership (P4)'. https://www.mfat.govt.nz/en/trade/free-trade-agreements/free-trade-agreements-in-force/p4/ (accessed January 2017).

active Third Parties (column 1), this effect disappears for states that are less active as Third Parties (column 2). Curiously, with country and year fixed effects, a ratchet dynamic is still clear for more active Third Parties (column 3), but the effect becomes negative for other states: deeper agreements are associated with shallower subsequent agreements (column 4).

In Table 7, I test the expectation that economically unlikely PTAs will be characterised by a larger increase in depth relative to previous practice. The dependent variable, DEPTH INCREASE, is the difference in (Rasch) depth between the current PTA and the average depth of the three preceding PTAs signed by Country A. I expect this variable to be positively signed. Column 1 presents results with the sample subsetted to those states most active as Third Parties, while column 2 presents results subsetted to other states. The difference is striking. For states that are most active as Third Parties in the DSU, those PTAs that are less well predicted economically and politically are associated with a 0.198 increase in PTA depth (measured on a scale between -1.728 and 1.885). This result is significant at the 99% confidence interval. For other states, PTAs that are less well-predicted economically and politically are not associated with an increase in agreement depth relative to preceding agreements.

Taken together, the results from these tests provide support for the hypothesised mechanism of sequencing. Those states that are most likely to sequence to shape the legal content of the global trade regime–operationalised here as states that are more active as complainants in the WTO's DSU–more clearly maintain the general practice of increasing agreement depth from one PTA to the next, consistent with an effort to establish and maintain stable expectations about the appropriate scope for a PTA. Negotiating with less economically and politically salient partners affords states an opportunity to experiment in agreement design, departing from past practice by signing a more ambitious agreement than their previous agreement.

Dependent Variable		Depth	(Rasch)	
Model	(1) Active 3rd Party	(2) Less 3rd Party	(3) Active 3rd Party	(4) Less 3rd Party
Depth of previous agreement	$0.293^{***}$	-0.021	$0.103^{***}$	$-0.109^{***}$
Distance (logged)	-0.067	$-0.047^{***}$ (0.014)	-0.024	0.014
Remoteness	$-0.836^{***}$	(0.011) -1.106*** (0.079)	$-0.819^{***}$	$-0.908^{***}$
Same continent	(0.175) $6.735^{***}$ (1.484)	(0.075) $8.914^{***}$ (0.649)	(0.210) $6.848^{***}$ (1.818)	(0.110) $7.360^{***}$ (0.961)
GDP sum (logged, t-5)	(1.404) $0.036^{***}$ (0.012)	(0.043) $0.014^{***}$ (0.004)	(1.010) $0.041^{***}$ (0.011)	$(0.035^{***})$ (0.005)
GDP difference (logged, t-5)	(0.012) 0.001 (0.016)	(0.004) 0.006 (0.007)	(0.011) 0.008 (0.013)	(0.005) $0.011^{**}$ (0.005)
Previous PTAs (own, t-5)	-0.018***	(0.007) $(0.003^{***})$	$-0.027^{***}$	-0.002
Previous PTAs (partner, t-5)	(0.004) $(0.002^{***})$	(0.000) $0.002^{***}$ (0.000)	-0.001	(0.002) $0.002^{***}$ (0.000)
Previous PTAs (ROW, t-5)	-0.006***	$(0.000)^{*}$ $(0.001^{*})^{*}$	-0.014	(0.000) 0.001 (0.012)
Previous PTAs (ROW, t-5, squared)	0.000***	(0.001) 0.000 (0.000)	(0.020) (0.000)	-0.000
Alliance	0.066	$-0.268^{***}$	-0.084	$-0.194^{***}$
Post-Cold War	(0.013) $(0.555^{***})$ (0.102)	-0.075	3.661	(0.010) $7.035^{**}$ (2.055)
Previous conflict	(0.152) (0.153) (0.149)	-0.098 (0.114)	(0.033)	(2.300) (0.080) (0.095)
GWP change	-0.006	$-0.132^{***}$	$-4.055^{***}$ (1.054)	-0.120 (0.286)
Hegemony	(0.013) $0.129^{***}$ (0.038)	(0.015) (0.015)	-0.211 (0.216)	(0.230) $0.630^{***}$ (0.237)
Polity scores (own)	(0.000) $0.014^{***}$ (0.003)	(0.015) $0.035^{***}$ (0.002)	0.001 (0.007)	-0.002
Polity scores (partner)	(0.003) $0.022^{***}$ (0.004)	(0.002) $0.033^{***}$ (0.001)	$(0.001)^{0.018***}$ $(0.003)^{0.018}$	(0.001) $0.025^{***}$ (0.001)
Both in GATT	$0.109^{**}$ (0.044)	(0.001) $0.051^{**}$ (0.024)	(0.000) $0.109^{**}$ (0.046)	-0.016
Both in WTO	(0.011) $1.163^{***}$ (0.128)	(0.021) $0.134^{***}$ (0.045)	(0.010) $0.280^{**}$ (0.121)	(0.010) $0.189^{***}$ (0.049)
Colonial relationship post-1945	(0.120) $0.678^{***}$ (0.133)	-0.061	(0.121) 0.198 (0.291)	-0.002 (0.075)
Constant	-3.028*** -0.723	-0.952*** -0.272	$\begin{array}{c} (0.251) \\ 20.955^{***} \\ (7.516) \end{array}$	(4.191)
Fixed effects:	No	No	Country; Year	Country; Year
Observations B-squared	1,228 0.769	4,540	1,228	4,540 0.896
No. clusters	697	1,891	697	1,891

Table 6: Establishing stable expectations: depth as a function of previous depth

Cells contain OLS regression estimates with robust standard errors clustered at the undirected dyad. DV is the Rasch depth of a PTA. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Dependent variable	Dependent variable Depth Increase (Rasch)					
Model	(1) Active 3rd Party	(2) Less 3rd Party				
	5-F IA average	5-r IA average				
Excessive bilateralism	$0.198^{**}$ $(0.089)$	-0.215 $(0.162)$				
Distance (logged)	0.078	0.079				
Bemoteness	(0.049) 0.008	-0.148				
	(0.262)	(0.383)				
Same continent	0.054	1.024				
	(2.142)	(3.194)				
GDP sum (logged, $t-5$ )	0.053**	0.031				
	(0.024)	(0.027)				
GDP difference (logged, $t-5$ )	-0.004	-0.023				
	(0.024)	(0.036)				
Previous PTAs (own, t-5)	0.010	-0.010				
	(0.008)	(0.014)				
Previous PTAs (partner, t-5)	-0.003	-0.005				
$\mathbf{P}_{\mathbf{D}}$	(0.002)	(0.004)				
FIEVIOUS F TAS (ROW, t-3)	$(0.034^{-1})$	(0.029)				
Previous PTAs (BOW t-5 squared)	-0.000*	0.000				
1 Tevious 1 1113 (100W, 1-5, squared)	(0,000)	(0,000)				
Alliance	-0.078	-0.399***				
	(0.074)	(0.141)				
Post-Cold War	-4.122	39.028***				
	(5.388)	(11.100)				
Previous conflict	0.005	$0.726^{**}$				
	(0.128)	(0.347)				
GWP change	0.277	6.942*				
	(1.753)	(3.920)				
Hegemony	0.501*	1.435***				
	(0.262)	(0.507)				
Polity scores (own)	-0.012	-0.003				
Polity george (partner)	(0.028)	(0.019)				
Tonty scores (partner)	(0.040)	(0.034)				
Both in GATT	0.121	0.106				
	(0.092)	(0.117)				
Both in WTO	$0.175^{\star}$	$0.315^{'}$				
	(0.105)	(0.194)				
Colonial relationship post-1945	-0.033	0.124				
	(0.139)	(0.634)				
Constant	-14.429	-62.078**				
	(9.600)	(26.502)				
Fixed effects	Country; Year	Country; Year				
Observations	762	568				
R-squared	0.405	0.417				
N_clust	610	409				

Table 7: Increases in depth of agreement relative to previous agreements

Cells contain OLS regression estimates with robust standard errors clustered at the dyad. DV is the difference in Rasch Depth of the current PTA relative to the average depth of the three preceding PTAs. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

## 5 Qualitative evidence: the EU and New Zealand

The above sections suggest that sequencing matters in the aggregate. How about for individual countries? Both the EU and New Zealand are active participants in the WTO's DSU, and share some other characteristics. Both are relatively wealthy–New Zealand and most EU states are OECD members, and both have a well-developed trade bureaucracy and experience negotiating ambitious trade agreements. They differ markedly in other respects, most obviously in terms of economic size. They also export dissimilar products. New Zealand's economy is highly dependent on the exportation of agricultural products, in particular dairy products.<sup>74</sup> While agriculture is important in the EU, European economies are much more diversified.<sup>75</sup>

Despite these economic differences, the two economies both approach trade negotiations with an eye to the future. New Zealand has relatively scarce resources in trade, and has pursued negotiations with its important trade partners. The New Zealand High Commissioner in Shanghai– one of the countries' most important trade posts–emphasized that New Zealand does not start with smaller countries and work its way up. Rather New Zealand seeks the most ambitious agreement it can with its important trade partners,<sup>76</sup>

Yet the shadow of future negotiations has an obvious influence on New Zealand officials' thinking. This is evident in discussion around the upgrade of the 2008 China-New Zealand FTA, negotiations on which were launched in 2017. The upgrade was reportedly precipitated in large part by the New Zealand dairy industry's perception that more recent Chinese agreements (such as the 2015 agreement with Australia) offered more advantageous access to the Chinese market for dairy. Re-balancing access to the Chinese market may have been the precipitating factor leading to the upgrade, but officials also point to the precedent-setting effects that the new talks offer. New Zealand's High Commissioner to Shanghai explains: "If you can achieve something in our bilateral upgrade that can then resonate back into the RCEP, China is a major negotiator in the RCEP... you're in a way piloting something, demonstrating something that could have a regional applicability."

<sup>&</sup>lt;sup>74</sup>Fonterra, the New Zealand dairy co-operative, is the single largest exporter of dairy products in the world.

<sup>&</sup>lt;sup>75</sup>The Hirschman Herfindahl Index measures diversification as the sum of squared shares of individual products as a proportion of total exports. The resulting value ranges from 0 (most diversification) to 1 (least diversification). New Zealand's H-H index in 2015 was 0.167, while the EU's was 0.066. For comparison, that of UNCTAD's 'developed economies' category was 0.067 in 2015: http://unctadstat.unctad.org/ (accessed August 2017).

<sup>&</sup>lt;sup>76</sup>Interview with Guergana Guermanoff, Shanghai, 19th June 2017. This approach was echoed in personal communications with Australian trade officials as well.

The case of the Trans-Pacific Partnership (TPP) and its origins as the 'P4' agreement between Brunei, Chile, Singapore and New Zealand–four small, highly open states that exchange little trade with one another–is also suggestive. New Zealand commentary indicates that the P4 agreement was signed with the ultimate goal of transformation into the TPP agreement, as highlighted in the quote in the above section.

Of course, China is New Zealand's most important, and largest, trade partner. New Zealand's ability to influence it into accepting agreement terms that it would otherwise not adopt is likely to be limited. Nevertheless, that New Zealand officials would keep in mind the future–or concurrent–RCEP negotiations supports the core argument of this paper: trade negotiators are aware of, and factor in, the influence of precedent into their negotiating approach. Such considerations appear to have been present for earlier agreements such as the Australia-NZ-ASEAN FTA (AANZFTA), which officials viewed as a means of remaining relevant (having a 'seat at the table') in the context of changes in the 'architecture' of Asian-Pacific regionalism. Part of this approach involved putting in place high-quality agreements that could be used as the basis for further liberalization at a later stage (i.e. with more important trade partners).<sup>77</sup>

One sees this concern for the design of future trade pacts in the EU's agreements as well. The authors of a report commissioned by the European Parliament's Committee on International Trade into the possibility of upgrading the trade component of the EU-Chile Association Agreement note that from the EU perspective, there is little economic rationale for expending negotiating capital on the agreement. Chile is a fairly unimportant trade partner for the EU, nor is it an important strategic partner. Any upgraded agreement would instead be seen as extending a favor to a friendly country. Yet, the authors note that there is nevertheless some rationale for an upgraded agreement when considering the wider context of the EU's agreements. In this context, upgrading the agreement with Chile could help to cement the EU's approach to regulating certain issue-areas, such as investment, where the EU has begun to adopt new regulatory approaches in recent years (as noted in the introduction).<sup>78</sup>

In fact, the agreement with Chile has been seen as an opportunity to promote other new approaches as well. Chile and Canada adopted a Trade and Gender chapter in their upgraded

<sup>&</sup>lt;sup>77</sup>Castle (2017); Leslie (2015). See also Davis, McKibbin, and Stoeckel (2000).

<sup>&</sup>lt;sup>78</sup>Polanco and Torrent (2016).

agreement, and there is some indication that the EU aims to introduce a similar chapter in an updated agreement with Chile. Some EU commentators have suggested that doing so could serve as a template for future negotiations. The EU's Trade Commissioner Cecilia Malmström has suggested that the EU "can see if this could be a pilot project for us in the European Union that we could take to other trade agreements".<sup>79</sup>

The New Zealand-China and EU-Chile upgrades illustrate the idea that even where sequencing does not involve signing an agreement with a less-well predicted partner earlier in order to influence the design of agreements with better-predicted partners (in that China is New Zealand's top trade partner, and both upgrades are recent ones), states use current agreements to lock in new approaches to regulating issue-areas (the EU and investment), to innovate on new issue-areas (Trade and Gender), or to encourage higher levels of ambition in order to influence other negotiations (China and RCEP).

Finally, it is worth returning briefly to the case of CETA. In the introduction, I pointed to CETA as an example of an agreement anticipated to set a precedent for another major agreement being negotiated concurrently—the TTIP. This view was articulated especially by civil society actors, with representative views in such publications as 'The Zombie ISDS', produced by a broad coalition of social movements.<sup>80</sup> This view was taken seriously by official commentators, being referenced in more impartial reports such as that by the British House of Commons Research Library.<sup>81</sup> Such public concern for the precedent-setting potential of CETA is telling: political contestation of the agreement focused not only on the consequences of liberalised economic ties between the EU and Canada, but also on the implications of the deal for future relations between the EU and the United States.

The grounds for this contestation were not without merit. The 'legal scrubbing' phase of CETA (following the EU's request for renegotiation cited above) saw significant revision to the text, bringing it in line with the EU's negotiating position on TTIP. As two recent observers note, "As stated in a February 2016 EU press release on CETA: '[f]ollowing the legal revision of the text, [a]ll the main elements of the EU's new approach on investment, as outlined in the EU's TTIP

<sup>&</sup>lt;sup>79</sup>Euractiv. 21 June, 2017. 'EU wants gender chapter included in Chile trade deal update'. https://www.euractiv.com/section/economy-jobs/news/eu-wants-gender-chapter-included-in-chile-trade-dealupdate/

<sup>&</sup>lt;sup>80</sup>Eberhardt (2016): Chapter 3.

<sup>&</sup>lt;sup>81</sup>Webb (2017), 6, 10.

proposal of November 2015 and contained in the recently concluded EU-Vietnam FTA, have been included in the finalised CETA text.'"<sup>82</sup>

# 6 Conclusion

Trade has become one of the most politically salient issues in contemporary international politics. Public backlash against ambitious new trade agreements raises an empirical puzzle. How do negotiators regulate contested issue-areas? How do they innovate their agreement design? I argue in this paper that an element of PTAs that has been relatively neglected is the sequence in which they are signed. I first present a theory of PTA sequencing. I argue that the power of precedent in agreement design and the 'stickiness' of legal language creates incentives for states to be strategic in their choice of partner, signing innovative agreements with less important economic partners first in order to increase the odds of achieving their ideal outcome with more important partners. This leads to the hypothesis that those PTAs that are *less* well predicted by economic factors should, paradoxically, be *more* ambitious, and should be signed *earlier*. This hypothesis is borne out in the evidence that I present. Moreover, and as predicted by a theory of sequencing in which the main objective is to influence the legal content of the trade regime writ large, the results are strongest for precisely those states that have demonstrated the greatest interest in the systemic implications of global trade rules, as measured by their participation as Third Parties in WTO disputes. Consistent with the mechanism I hypothesise lies behind sequencing, unlikely PTAs are associated with a jump in agreement depth relative to states' previous agreements, and those states most likely to sequence indeed appear to be more consistent in their effort to establish stable expectations about agreement depth.

Moreover, qualitative evidence from recent negotiations involving New Zealand and the EU provide further evidence of states' concern for the precedential implications of the agreements they negotiate in the present, and their attempts to set in place innovative approaches in the hope that they will be replicated in subsequent negotiations. To return to the motivating example presented in the introduction, the EU has established an identity as an economic power deeply

<sup>&</sup>lt;sup>82</sup>Alschner and Skougarevskiy (2016). See: European Commission, 'CETA: EU and Canada Agree on New Approach on Investment in Trade Agreement', Press release, Brussels, 29 February 2016, available at: http://europa.eu/rapid/press-release\_IP-16-399\_en.htm (visited 27 July 2017).

committed to the current liberal trading system. Yet recent efforts to negotiate highly ambitious agreements have run afoul of popular opposition to agreement on new trade issues. The European Commission has had clear incentives to build momentum towards a more acceptable alternative model for investor-state relations that was in line with its preferences. It has been negotiating a contentious agreement with the United States (now very much on the back-burner following the election of Donald Trump), at the same time as the regulation of foreign investment has gained increasing prevalence as a contested element of modern trade agreements. It is in this context that renegotiation of CETA to include references to the EU's new investment court system appear logical. By establishing its ideal outcome with other countries, the Commission may have increased the likelihood that an eventual PTA with the United States (or with other countries–such as China) would approach this ideal model.

In sum, this paper makes a first cut at empirically substantiating the argument about sequencing. A continuing research program will explore sequencing from a more fine-grained perspective, by examining the specific commitments made by states in agreements at different times. Future research will also examine the role that revised agreements play in consolidating a country's approach, or in allowing experimentation with new approaches.

It is important to comment on the distributional consequences of these findings. The evidence presented above suggests that those states that are most likely to sequence agreements are states that not only have a concern for the content of global trade rules, but also the ability to translate that concern into action. The existence of the current multilateral system is generally seen to benefit less powerful states, as it reduces the role of power in cooperative outcomes.<sup>83</sup> Yet, as other observers have noted, the resulting system has hardly put states on an equal footing. To echo Pelc's finding that the strategic exploitation of precedent in the WTO's case law appears to be the preserve of wealthy countries that have the legal expertise and resources to advance cases strategically,<sup>84</sup> it appears that states that have greater legal capacity are also more likely to sequence trade agreements. To the extent that sequencing enables states to promote the adoption of their preferred trade rules, this would suggest that powerful states continue to benefit most from systems that ostensibly do away with power-based bargaining.

<sup>&</sup>lt;sup>83</sup>Ikenberry (2001).

 $<sup>^{84}</sup>$ Pelc (2014).

# References

- Aggarwal, Vinod K. 2013. "U.S. Free Trade Agreements and Linkages." International Negotiation 18: 89–110.
- Allee, Todd, and Andrew Lugg. 2016. "Who wrote the rules for the Trans-Pacific Partnership?" Research & Politics 3(3).
- Alschner, Wolfgang. 2013. "Americanization of the BIT universe: the influence of friendship, commerce and navigation (FCN) treaties on modern investment treaty law." Goettingen Journal of International Law 5(2): 455–486.
- Alschner, Wolfgang, and Dmitriy Skougarevskiy. 2015. "Consistency and legal innovation in the BIT universe." Stanford Public Law Working Paper (2595288).
- Alschner, Wolfgang, and Dmitriy Skougarevskiy. 2016. "Mapping the Universe of International Investment Agreements." Journal of International Economic Law 19(3): 561.
- Alter, Karen J., and Sophie Meunier. 2009. "The Politics of International Regime Complexity." *Perspectives on Politics* 7(1): 13–24.
- Baccini, Leonardo, and Andreas Dür. 2012. "The new regionalism and policy interdependence." British Journal of Political Science 42(1): 57–79.
- Baccini, Leonardo, and Andreas Dür. 2015. "Investment discrimination and the proliferation of preferential trade agreements." Journal of Conflict Resolution 59(4): 617–644.
- Baccini, Leonardo, and Johannes Urpelainen. 2014. "International Institutions and Domestic Politics: Can Preferential Trading Agreements Help Leaders Promote Economic Reform?" The Journal of Politics 76(01): 195–214.
- Baccini, Leonardo, Andreas Dür, and Yoram Haftel. 2014. "Imitation and Innovation in International Governance: The Diffusion of Trade Agreement Design." In *Trade Cooperation: The Purpose, Design and Effects of Preferential Trade Agreements*, ed. Andreas Dür, and Manfred Elsig. Cambridge: Cambridge University Press.

- Baccini, Leonardo, Pablo M. Pinto, and Stephen Weymouth. 2017. "The Distributional Consequences of Preferential Trade Liberalization: Firm-Level Evidence." *International Organization* Forthcoming.
- Baier, Scott L., and Jeffrey H. Bergstrand. 2004. "Economic determinants of free trade agreements." Journal of International Economics 64(1): 29–63.
- Baier, Scott L., Jeffrey H. Bergstrand, and Ronald Mariutto. 2014. "Economic Determinants of Free Trade Agreements Revisited: Distinguishing Sources of Interdependence." *Review of International Economics* 22(1): 31–58.
- Baldwin, Richard. 2012. "Sequencing Asian Regionalism: Theory and Lessons from Europe." Journal of Economic Integration 27(1): 1–32.
- Baldwin, Richard, and Frédéric Robert-Nicoud. 2015. "A simple model of the juggernaut effect of trade liberalisation." *International Economics* 143: 70–79.
- Baldwin, Richard E. 1997. "The Causes of Regionalism." The World Economy 20(7): 865–888.
- Björkdahl, Annika, Natalia Chaban, John Leslie, and Annick Masselot, eds. 2015. Importing EU Norms: Conceptual Framework and Empirical Findings. United Nations University Series on Regionalism Springer.
- Börzel, Tanja A., and Thomas Risse. 2012. "From Europeanisation to Diffusion: Introduction." West European Politics 35(1): 1–19.
- Busch, Marc L., and Krzysztof J. Pelc. 2010. "The Politics of Judicial Economy at the World Trade Organization." *International Organization* 64: 257–279.
- Castle, Matthew. 2017. "Embedding regional actors in social and historical context: Australia-New Zealand integration and Asian-Pacific regionalism." *Review of International Studies* Firstview(July): 1–23.
- Castle, Matthew, and Krzysztof J. Pelc. 2017. "The Causes and Effects of Leaks in International Negotiations." *McGill University working paper*.

- Castle, Matthew, Simon Le Quesne, and John Leslie. 2016. "Divergent Paths of State-Society Relations in European and Trans-Tasman Economic Integration." *Journal of European Integration* 38(1): 41–59.
- Chen, Maggie X., and Sumit Joshi. 2010. "Third-country effects on the formation of free trade agreements." *Journal of International Economics* 82: 238–248.
- Chisik, Richard. 2003. "Gradualism in free trade agreements: a theoretical justification." *Journal* of International Economics 59(2): 367–397.
- Damro, Chad. 2012. "Market power Europe." Journal of European Public Policy 19(5): 682–699.
- Davis, Lee, Warwick McKibbin, and Andrew Stoeckel. 2000. Economic benefits from an AFTA-CER Free Trade Area: Year 2000 study'. Report prepared for department of foreign affairs and trade Centre for International Economics Canberra and Sydney: .
- Dent, Christopher M. 2003. "Networking the region? The emergence and impact of Asia-Pacific bilateral free trade agreement projects." *The Pacific Review* 16(1): 1–28.
- Drezner, Daniel W. 2007. All Politics is Global: Explaining International Regulatory Regimes. Princeton: Princeton University Press.
- Dür, Andreas, Leonardo Baccini, and Manfred Elsig. 2014. "The design of international trade agreements: Introducing a new dataset." *Review of International Organizations* 9(3): 353–375.
- Eberhardt, Pia. 2016. The Zombie ISDS: Rebranded as ICS, rights for corporations to sue states refuse to die. Online publication Corporate Europe Observatory (CEO) https://corporateeurope.org/sites/default/files/attachments/the\_zombie\_isds\_0.pdf: .
- Egger, Peter, and Mario Larch. 2008. "Interdependent preferential trade agreement memberships: An empirical analysis." *Journal of International Economics* 76: 384–399.
- Elkins, Zachary, and Beth A. Simmons. 2005. "On Waves, Clusters, and Diffusion: A Conceptual Framework." Annals of the American Academy of Political and Social Science 598(1): 33–51.
- Elkins, Zachary, Andrew T. Guzman, and Beth A. Simmons. 2006. "Competing for Capital: The Diffusion of Bilateral Investment Treaties, 1960-2000." *International Organization* 60: 811–846.

- Feinberg, Richard E. 2003. "The Political Economy of the United States' Free Trade Agreements." The World Economy 26: 1019–1040.
- Finnemore, Martha. 1996. "Norms, Culture, and World Politics: Insights from Sociology's Institutionalism." 50(2): 325–347.
- Finnemore, Martha. 2009. "Legitimacy, Hypocrisy, and the Social Structure of Unipolarity: Why Being a Unipole Isn't All It's Cracked Up to Be." World Politics 61(1): 58–85.
- Gibler, Douglas M. 2009. International military alliances, 1648-2008. CQ Press. CQ Press.
- Gowa, Joanne. 1994. Allies, Adversaries and International Trade. Princeton: Princeton University Press.
- Gowa, Joanne, and Edward D. Mansfield. 1993. "Power Politics and International Trade." The American Political Science Review 87: 408–420.
- Grossman, Gene M., and Elhanan Helpman. 1994. "Protection for sale." American Economic Review 84(4): 833–850.
- Gruber, Lloyd. 2000. Ruling the World: Power Politics and the Rise of Supranational Institutions. Princeton, N.J.: Princeton University Press.
- Hall, Peter A., and Rosemary C. R. Taylor. 1996. "Political Science and the Three New Institutionalisms." *Political Studies* 44(5): 936–957.
- Hawkins, Darren. 2004. "Explaining costly international institutions: Persuasion and enforceable human rights norms." *International Studies Quarterly* 48(4): 779–804.
- Higgott, Richard. 2004. "US Foreign Policy and the 'Securitization' of Economic Globalization." International Politics 41: 147–175.
- Ikenberry, G. John. 2001. After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order after Major Wars. Princeton, N.J.: Princeton University Press.
- Jandhyala, Srividya, Witold J. Henisz, and Edward D. Mansfield. 2011. "Three Waves of BITs: The Global Diffusion of Foreign Investment Policy." *Journal of Conflict Resolution* 55(6): 1047–1073.

- Johns, Leslie, and Krzysztof J. Pelc. 2016. "Fear of Crowds in WTO Disputes: Why Don't More Countries Participate?" Journal of Politics 78: 88–104.
- Kono, Daniel Y. 2006. "Optimal Obfuscation: Democracy and Trade Policy Transparency." American Political Science Review 100(3): 369–384.
- Koremenos, Barbara, Charles Lipson, and Duncan Snidal. 2001. "The Rational Design of International Institutions." *International Organization* 55(4): 761–799.
- Krasner, Stephen D. 1983. "Regimes and the Limits of Realism: Regimes as Autonomous Variables." In *International Regimes*, ed. Stephen D. Krasner. Ithaca, N.Y.: Cornell University Press pp. xx–xx.
- Lauterpacht, Hersch. 1982. The Development of International Law by the International Court. Cambridge University Press.
- Lawrence, Robert Z. 1996. Regionalism, Multilateralism and Deeper Integration. Washington, DC: Brookings Institution.
- Leslie, John. 2015. "Regionalism by Diffusion and Design: Australasian Policymakers, Europe and Asian-Pacific Economic Integration." *Asia-Europe Journal* 13(2): 193–210.
- Lupu, Yonatan, and Erik Voeten. 2012. "Precedent in international courts: A network analysis of case citations by the European court of human rights." British Journal of Political Science 42(02): 413–439.
- Mansfield, Edward D., and Helen V. Milner. 1999. "The New Wave of Regionalism." International Organization 53(3): 589–627.
- Mansfield, Edward D., and Helen V. Milner. 2012. Votes, Vetoes and the Political Economy of International Trade Agreements. Princeton: Princeton University Press.
- Mansfield, Edward D., Helen V. Milner, and B. Peter Rosendorff. 2002. "Why Democracies Cooperate More: Electoral Control and International Trade Agreements." *International Organization* 56: 477–514.

- March, James G, and Johan P Olsen. 1998. "The Institutional Dynamics of International Political Orders." International Organization 52: 943–969.
- Marshall, Monty G., Ted Robert Gurr, and Keith Jaggers. 2016. POLITY IV Project: Political Regime Characteristics and Transitions, 1800-2015. Dataset users' manual. Center for Systemic Peace.
- Mayer, Thierry, and Gianmarco Ottaviano. 2007. "The happy few: the internationalisation of European firms. New facts based on firm-level evidence." *Bruegel Blueprint Series* 3.
- Mayer, Thierry, and Soledad Zignago. 2011. Notes on CEPII's distances measures: The GeoDist database. Working Papers 2011-25 CEPII.
- McGregor, 2016. Janyce. "EU quietly asks Canada rework deal's  $\mathrm{to}$ trade clause." thorny investment Canadian Broadcasting Company, January 21: http://www.cbc.ca/m/touch/politics/story/1.3412943.
- Melitz, Marc J. 2003. "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity." *Econometrica* 71(6): 1695–1725.
- Meunier, Sophie, and Jean-Frédéric Morin. Forthcoming. "The European Union and the Space-Time Continuum of Investment Agreements." *Journal of European Integration*.
- Milewicz, Karolina, James Hollway, Claire Peacock, and Duncan Snidal. 2016. "Beyond Trade: The Expanding Scope of the Nontrade Agenda in Trade Agreements." *Journal of Conflict Resolution* Online only(September): DOI: https://doi.org/10.1177/0022002716662687.
- Moravcsik, Andrew. 1998. The choice for Europe: Social purpose and state power from Messina to Maastricht. Ithaca, NY: Cornell University Press.
- Morin, Jean-Frédéric, and Edward Richard Gold. 2014. "An Integrated Model of Legal Transplantation: The Diffusion of Intellectual Property Law in Developing Countries." International Studies Quarterly 58(4): 781–792.
- Morin, Jean-Frédéric, Joost Pauwelyn, and James Hollway. 2017. "The Trade Regime as a Complex Adaptive System: Exploration and Exploitation of Environmental Norms in Trade Agreements." *Journal of International Economic Law* 20(2): 365–390.

- Osgood, Iain. 2016. "Differentiated Products, Divided Industries: Firm Preferences over Trade Liberalization." *Economics and Politics* 28(2): 161–180.
- Osgood, Iain, Dustin Tingley, Thomas Bernauer, In Song Kim, Helen V. Milner, and Gabriele Spilker. 2017. "The Charmed Life of Superstar Exporters: Survey Evidence on Firms and Trade Policy." *Journal of Politics* 79(1): 133–152.
- Palmer, Glenn, Vito d'Orazio, Michael Kenwick, and Matthew Lane. 2015. "The MID4 dataset, 2002–2010: Procedures, coding rules and description." *Conflict Management and Peace Science* 32(2): 222–242.
- Paulwelyn, Joost, and Wolfgang Alschner. 2015. "Forget about the WTO: the network of relations between PTAs and double PTAs." In *Trade cooperation: the purpose, design and effects of preferential trade agreements*, ed. Andreas Dür, and Manfred Elsig. Cambridge: Cambridge University Press pp. 497–532.
- Pauwelyn, Joost. 2014. "At the Edge of Chaos? Foreign Investment Law as a Complex Adaptive System, How It Emerged and How It Can Be Reformed." ICSID Review - Foreign Investment Law Journal 29(05): 372–418.
- Pelc, Krzysztof J. 2014. "The Politics of Precedent in International Law: A Social Network Application." American Political Science Review 108(04): 886–886.
- Pelc, Krzysztof J. 2016. Making and Bending International Rules: The Design of Exceptions and Escape Clauses in Trade Law. Cambridge [England]; New York: Cambridge University Press.
- Pierson, Paul. 2004. Politics in Time: History, Institutions and Social Analysis. Princeton: Princeton University Press.
- Polanco, Rodrigo, and Ramon Torrent. 2016. Analysis of the prospects for updating the trade pillar of the European Union-Chile Association Agreement. Technical report Policy Department of Directorate-General for External Policies doi:10.2861/46519: .
- Pouliot, Vincent, and Jean-Philippe Thérien. 2015. "The politics of inclusion: Changing patterns in the governance of international security." *Review of International Studies* 41(004): 211–237.

- Ravenhill, John. 2010. "The 'New East Asian Regionalism': A Political Domino Effect." Review of International Political Economy 17(2): 178–208.
- Ross, Marc Howard, and Elizabeth Homer. 1976. "Galton's Problem in Cross-National Research." World Politics 29(1): 1–28.
- Ruggie, John Gerard. 1982. "International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order." *International Organization* 36(2): 379–415.
- Ruggie, John Gerard. 1992. "Multilateralism: the Anatomy of an Institution." International Organization 46(3): 561–598.
- Simmons, Beth A., and Zachary Elkins. 2004. "The Globalization of Liberalization: Policy Diffusion in the International Political Economy." *The American Political Science Review* 98(1): 171–189.
- Stein, Arthur A. 1982. "Coordination and Collaboration: Regimes in an Anarchic World." International Organization 36: 299–324.
- Steinberg, Richard H. 2002. "In the Shadow of Law or Power? Consensus-Based Bargaining and Outcomes in the GATT/WTO." International Organization 56(2): 339–374.
- Trade Cooperation: The Purpose, Design and Effects of Preferential Trade Agreements. 2014. Cambridge: Cambridge University Press.
- Webb, Dominic. 2017. CETA: the EU-Canada free trade agreement. Briefing Paper Number 7492, House of Commons Library www.parliament.uk/commons-library: .
- Whalley, John. 1998. "Why do countries seek regional trade agreements?" In *The Regionalization* of the World Economy, ed. Jeffrey A. Frankel. Chicago: University of Chicago Press chapter 3.

# Appendix A

Variable	Mean	Ν	Standard deviation	Minimum	Maximum	Skewness	Kurtosis
PTA	0.017	1468500	0.129	0	1	7.480	56.946
Depth (Index)	2.140	24440	1.854	0	7	1.109	3.822
Depth (Rasch)	-0.219	21204	0.981	-1.728	1.885	0.072	1.882
Exports (logged, t-10)	7.398	1071173	7.795	0	27.159	0.275	1.380
GDP difference (t-5)	2.759	894170	2.051	0	13.676	0.895	3.447
GDP sum (t-5)	46.494	894170	3.495	33.043	60.902	0.165	2.899
Remoteness	1.683	1389381	3.371	0	9.422	1.506	3.275
Same Continent	0.243	1468500	0.429	0	1	1.200	2.440
Previous PTAs (own, t-5)	8.074	1301027	12.645	-1	88	3.206	15.472
Previous PTAs (partner's, t-5)	7.677	1301027	12.254	-1	88	3.307	16.437
Previous PTAs (ROW, t-5)	337.288	1468500	276.484	0	789	0.339	1.547
Previous PTAs (ROW, t-5, squared)	190206.700	1468500	218306.800	0	622521	0.775	2.023
Alliance	0.090	1480563	0.286	0	1	2.868	9.228
Previous conflict	0.006	1481016	0.076	0	1	13.042	171.103
GWP change	3.834	1468766	1.318	-0.1	6.269	-0.571	3.432
Hegemony	13.860	1480920	2.074	10.124	19.578	0.375	3.149
Polity scores (own)	2.048	1189064	7.265	-10	10	-0.307	1.433
Polity scores (partner)	1.643	1138302	7.314	-10	10	-0.229	1.387
Both in GATT	0.340	1468500	0.474	0	1	0.673	1.453
Both in WTO	0.265	1468500	0.442	0	1	1.063	2.130
Colonial relationship post-1945	0.009	1379787	0.097	0	1	10.123	103.474
Year	1988.203	1481016	18.276	1946	2016	-0.382	2.004
DSU cases as Third Party	18.176	1266487	36.345	0	165	2.481	8.387
DSU cases as Complainant	4.633	1266487	15.104	0	112	5.557	36.564
DSU cases as Respondent	4.432	1266487	15.276	0	129	6.329	47.218
Innovative PTA	0.296	24920	0.457	0	1	0.893	1.797
PTA signature order	16.758	14674	18.785	1	95	2.138	7.146

Table 8: Summary statistics of key variables

## Table 9: High-DSU states

Argentina Australia Austria Belgium Belgium-Luxembourg  $\operatorname{Brazil}$ Bulgaria Canada Chile China, P.R.: Mainland Chinese Taipei Croatia Cyprus Czech Republic Denmark Estonia European Union Finland France Germany Greece Hungary India Ireland Italy Japan Korea, Republic of Latvia Lithuania Malta Mexico Netherlands New Zealand Norway Poland Portugal Romania Slovak Republic Slovenia Spain Sweden Thailand Turkey United Kingdom United States

Table 10: Excessive bilateralism (High-DSU)

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Algeria EC	EC Moldova
Algeria EC Euro-Med Association Agreement	EC Morocco
Argentina Mexico	EC Morocco Association Agreement
Argentina Venezuela	EC Nice
Association of Southeast Asian Nations (ASEAN) FTA	EC Portugal
Association of Southeast Asian Nations Australia New Zealand FTA (AANZFTA)	EC Single European Act
Association of Southeast Asian Nations China	EC South Africa
Association of Southeast Asian Nations China Services	EC Syria
Association of Southeast Asian Nations India	EC Tunisia
Association of Southeast Asian Nations Japan	EC Tunisia Euro-Med Association Agreement
Association of Southeast Asian Nations Korea	EFTA Egypt
Association of Southeast Asian Nations Korea services	EFTA GCC
Australia Chile	EFTA Israel
Australia China	EFTA Jordan
Australia Japan	EFTA Mexico
Australia Korea	EFTA Morocco
Australia Malaysia	EFTA Singapore
Australia Papua New Guinea	EFTA Southern African Customs Union (SACU)
Australia US	EFTA Tunisia
Bahrain US	Economic Cooperation Organization (ECO) Preferences
Bangkok Agreement	Egypt MERCOSUR
Bhutan India	El Salvador Mexico
Brazil Cuba	European Economic Area (EEA)
Brazil Guyana	Georgia Turkey
Bulgaria Israel	Hungary Israel
CARIFORUM EC EPA	Indonesia Japan
Canada Costa Rica	Israel MERCOSUR
Canada EC (CETA)	Israel Mexico
Canada EFTA	Israel Poland
Canada Jordan	Israel US
Canada Korea	Japan Mongolia
Central America EC	Japan Switzerland
Chile EC	Japan Thailand
Chile India	Jordan Turkey
Chile Japan	Jordan US
Chile Turkey	Korea Turkey
China New Zealand	Korea US
China Peru	Korea US environmental side agreement
China Singapore	Latin American Integration Association (ALADI LAIA)
Colombia EFTA	MERCOSUR Southern African Customs Union (SACU)
Colombia Peru EC	Malaysia New Zealand
Cote d'Ivoire EC EPA	Malaysia Turkey
D8 PTA	Mexico Uruguay
EC Egypt	Morocco Turkey
EC Egypt Agreement	Morocco US
EC Egypt Euro-Med Association Agreement	New Zealand Singapore
EC Finland	North American Free Trade Agreement (NAFTA)
EC Georgia	Oman US
EC Israel	Panama US
EC Jordan	Singapore US
EC Jordan Euro-Med Association Agreement	South Asian Free Trade Area (SAFTA)
EC Korea	Syria Turkey
EC Lisbon	Transpacific Partnership (TPP)
EC Maastricht	Tunisia Turkey
EC Mexico	

Га	ble	11:	Excessive	bilateralism	(Low-DSU)
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EFTA GCC African Economic Community Agadir Agreemen Albania EC SAA EFTA Jordan EFTA Korea EFTA Mexico Algeria EC Algeria Jordan EFTA Morocco Andean Community Sucre Protocol EFTA Peru Andean Group Cartagena Agreement EFTA Singapore EFTA Southern African Customs Union (SACU) Armenia Estonia Association of Caribbean States EFTA Tunisia Association of Southeast Asian Nations Australia New Zealand FTA (AANZFTA) Association of Southeast Asian Nations China Economic Community Of West African States (ECOWAS) Economic Cooperation Organization (ECO) Preferences Association of Southeast Asian Nations Japan Economic Cooperation Organization Trade Agreement (ECOTA) Association of Southeast Asian Nations Korea Association of Southeast Asian Nations Korea services Egypt MERCOSUR Egypt Syria Australia Malaysia Australia Papua New Guinea Georgia Turkey Greater Arab Free Trade Agreement Guinea Morocco Australia Papua New Guinea Gulf Cooperation Council (GCC) Gulf Cooperation Council (GCC) Singapore Australia Singapore Azerbaijan Belarus Bahrain US Guyana Panama Bangkok Agreement Hungary Israel Bulgaria Israel India MERCOSUR CARIFORUM EC EPA Canada EC (CETA) Indonesia Pakistan Inter-Arab Trade Agreement Canada EFTA Iran Sri Lanka Israel MERCOSUR Canada Israel Canada Jordan Israel Mexico Caribbean Community (CARICOM) Caribbean Community (CARICOM) Costa Rica Caribbean Community (CARICOM) Protocol on Services Israel Panama Israel Poland Israel US Central America EC Central America EFTA Japan Peru Japan Philippines Central American Free Trade Agreement (CAFTA) Central American Free Trade Agreement (CAFTA) Dominican Republic Japan Switzerland Jordan Morocco Central European Free Trade Agreement (CEFTA) Jordan Singapore Chad Morocco Jordan Sudan Chile EFTA Jordan US Chile Malaysia Korea Peru MERCOSUR Southern African Customs Union (SACU) China Costa Rica China Peru Malaysia New Zealand Colombia EFTA Colombia Israel Malaysia Turkey Mauritius Pakistan Colombia Peru EC Mauritius Turkey Common Economic Zone Common Market for Eastern and Southern Africa (COMESA) Melanesian Spearhead Group (MSG ) Morocco Turkey Commonwealth of Independent States (CIS) Morocco UAE Costa Rica Dominican Republic Morocco US Costa Rica Singapore New Zealand Singapore Cote d'Ivoire EC EPA Croatia Moldova Oman US PTA for Eastern and Southern African States D8 PTA Panama Singapore EC Egypt Panama US environmental side agreement EC Egypt Agreement Peru Singapore EC Egypt Euro-Med Association Agreement Peru Thailand EC Georgia Singapore US EC Israel South Asian Association for Regional Cooperation, Preferential Trading Arrangement (SAPTA) EC Jordan South Asian Free Trade Area (SAFTA) EC Jordan Euro-Med Association Agreement Syria Turkey EC Morocco Trans Pacific Strategic EPA EC Morocco Association Agreement Transpacific Partnership (TPP) EC Syria Tunisia Turkey EC Tunisia Uruguay Venezuela EFTA Egypt