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About the melting of icebergs:

Political and economic determinants of dispute initiation and resolution in the WTO

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A. Introduction

What do we know about, and how can we improve our understanding of, the performance of the enforcement mechanism of World Trade Organization (WTO) norms and rules? Such performance can be thought of as a function of the degree and speed with which it incentivises WTO members' first and second order compliance with WTO rules. First order compliance can be conceived as the extent to which WTO members conduct trade policies that are in line with their international commitments under WTO law. Second order compliance grasps whether states bring their policies into line with recommendations of the WTO Dispute Settlement Body. In this case the question is how WTO members react to trade partner's demands when these partners raise complaints with the adjudicative body of the WTO.

The literature on the institutional foundations of international cooperation has long taught us that the existence of mechanisms for the credible enforcement of agreed upon rules is key to overcoming problems of cooperation that are typical of international trade relations (Mayer 1981; Keohane 1984; Martin 1992; Bagwell and Staiger 2001). Any cooperative equilibrium in the form of agreements on the liberalisation of trade can be expected to remain unstable unless robust and effective enforcement mechanisms are put in place. This is because states face ever-present powerful incentives to renege on their trade liberalisation commitments, either by failing to implement the rules they have negotiated and eventually raising new trade barriers in contravention of the rules they have agreed upon, or by failing to correct their misbehaviour. Theory thus suggests that a quasi-judicialised system of enforcement such as the WTO Dispute Settlement Mechanism (DSM) should be capable of preventing both first order and second order compliance problems, by creating disincentives

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for policies incompatible with WTO rules being adopted in the first place, and compelling WTO members to bring their policies back into compliance with WTO rules whenever their wrongdoing is ascertained.

But has the empirical record of enforcement of rules in the WTO met these theoretical expectations? Do WTO members live up to their obligations or do they pursue policies and actions that are in conflict with these commitments? And, do WTO members bring their policies back into compliance swiftly when they are found to be in violation of their commitments, or are they impermeable to such pressures?

In this chapter, we review the state of the art of existing theory-driven empirical research on economic and political determinants with regard to both dimensions of the performance of the WTO's DSM, and suggest possible avenues for pushing this research agenda forward. To gain relevant insights on first order compliance, we argue in favour of a shift of empirical focus from formalised observable trade disputes to potential ones. Through an exclusively empirical focus on actual trade disputes we can infer very little about the degree of first order compliance with WTO rules. Observing that in some instances the policy-makers of some WTO members decide to act upon the requests of domestic organized groups to seek the removal of WTO-incompatible trade barriers abroad by filing a formal complaint tells us only that some WTO-inconsistent policies were challenged, not that all such WTO-inconsistent policies were targeted. In fact, the literature shows that trade policy officials in WTO members decided to act upon a small fraction of the demands made by domestic exporters seeking the removal of policies allegedly in violation of WTO agreements through the DSM. The greatest challenge for empirical research on first order compliance is therefore to set the benchmark of how many cases *could* have been filed, that is to define the universe of potential cases out of which governments select topics that lead to the filing of WTO disputes. Doing so enables one to overcome the methodological problem of selection bias by which inferences about first order compliance are developed on the basis of few actual and observable WTO disputes and, in a second stage, to shed light on some of the political and economic factors that might explain the conditions under which government representatives select the foreign trade barriers they target in WTO litigation.

While empirical research on potential disputes can improve our understanding of the overall record of first order compliance with WTO rules, an important component of the performance of WTO enforcement institutions concerns the extent to which they incentivise compliance once the adjudicative body of the WTO is formally activated. For this purpose, we first review a series of theoretically possible political and economic determinants of

dispute resolution, i.e. systematic explanations for defendants' responses to actual WTO dispute settlement complaints. In our view, the challenge in analysing this tip of the iceberg of actual WTO disputes lies in assessing the relative weight of, and the relationship between possible political determinants of compliance and timely resolution of disputes. The existing literature on WTO dispute settlement has already shed light on numerous important aspects of the political economy of second order compliance in the WTO (Bernauer, Elsig and Pauwelyn 2014; De Bièvre and Poletti 2015). These include: strategic behaviour by dispute settlement panels (Kelemen 2001; Garrett and Smith 2002; Busch and Pelc 2010), the choice of institutional venue for resolving trade disputes (Busch 2007; Davis and Shirato 2007), why disputes escalate (Busch 2000; Guzman and Simmons 2002; Davis 2012), whether the DSM enforces or informs (Sattler, Spilker and Bernauer 2014), how litigation affects the domestic balance of trade-related interest groups (Goldstein and Martin 2000; Goldstein and Steinberg 2008; Poletti 2010; Poletti 2011; Poletti and De Bièvre forthcoming), under what conditions parties comply with decisions adopted through third party review (Bown 2004; Davis 2008; Young 2010; Poletti and De Bièvre 2014), and the effects of judicialisation on interest mobilisation (Poletti, De Bièvre and Hanegraaff 2015; De Bièvre et al. 2016). Despite the growing quantity and quality of this literature, we contend that the question of how to define second order compliance conceptually and measure it empirically remains problematic, and suggest possible ways to overcome these problems.

Assessing the performance of the enforcement mechanisms of the WTO has never been more relevant than it is now. The financial crisis of 2007–2008 and the ensuing sovereign debt crises of the Eurozone created social and economic havoc that have led to sustained demands for protectionism. In addition, the global economy is undergoing rapid changes, not least due to the rise of so-called emerging economies, which promise to transform economic power structures in international trade relations. Also, the impasse and then meagre results of the Doha Round negotiations have further increased the importance of the WTO's judicial arm as a tool for maintaining a liberal trade regime. These systemic transformations can be expected to have significant effects on the performance of multilateral institutions such as the WTO, which regulates more than € 23 trillion in trade in goods and services on the basis of formal treaty agreements every year. Existing research suggests that the WTO has performed quite well so far with respect to both first and second order compliance (Allee 2005; Wilson 2007; Irwin and Mavroidis 2008; Zangl 2008; Zangl et al. 2012; Baccini and Kim 2012). In this chapter we argue in favour of more scholarly work to acquire a deeper understanding of whether, and if so under what conditions, the WTO has

performed well in terms of fostering greater compliance with multilateral trade rules.

B. Melting the bottom of the iceberg: which potential disputes never materialise?

When it comes to assessing first order compliance with WTO rules, political scientists and political economists have extensively analysed WTO dispute settlement, focusing mainly on actual and often on highly visible trade disputes. However, actual disputes are only the tip of the iceberg. When governments initiate trade disputes in the WTO they tend to do so in response to pressures from domestic producers who may have been negatively affected by the existence of certain policies or by the imposition of new ones in other WTO members. Such exporters may be negatively affected either because such policies restrict their export opportunities in third markets (e.g. disputes over export subsidies) or because they confront exporters with allegedly WTO-inconsistent import restrictions in the defendant's market (Bown and Reynolds 2014).

A number of studies on WTO members' policies and actions potentially in conflict with WTO laws concur with the opinion that only a small fraction of such policies brought to the attention of policy-makers in (potential) complainants end up being litigated at the WTO (Davis and Shirato 2007; Kim 2008; Young 2009; Davis 2012). Most of the WTO-incompatible trade barriers simply do not come to the surface because governments do not always respond by launching a WTO complaint in response to pressures emanating from mobilized domestic groups. This may be because producers and exporters do not report these trade barriers to their public authorities, or because nobody actually ever noticed that some measures are non-WTO-conforming.

One of the key challenges in the study of the disputes that have been filed at the WTO is therefore to set the benchmark in terms of how many and what types of cases could have been filed, but were not. What is the universe of potential cases from which governments select topics that lead to the filing of a case before the WTO DSM? And which types of trade barriers are more likely to be signalled by domestic constituencies? Difficulties in clearly defining the potential universe of cases, the so called 'iceberg' issue, raises the question of selection bias in trade dispute research in general, and in the empirical assessment of first order compliance in particular. Scholars are well aware of the selection problem in studying litigation outcomes in domestic legal settings (Priest and Klein 1984). The same problems exist at the international level and it has been convincingly argued that problems of selection plague the empirical analysis of WTO dispute settlement (Kim 2008). Two key problems arise from failing to recognise that trade disputes are only a small fraction of the total number

of policies in violation of WTO agreements. First, observers risk drawing incorrect inferences about first order compliance, depicting trade interactions as conflictive when they may in fact be quite cooperative, or vice versa. For instance, high profile WTO disputes initiated by the United States (US) against the European Union (EU)'s bans on imports of hormone-treated beef and on genetically modified (GM) crops have led some commentators to portray the EU as a WTO member with structural problems of first order compliance in the areas of consumer and health safety regulation (Davis 2003; Young 2004). However, these are the only two WTO disputes that emerged out of nearly 3000 notifications these two WTO members brought to the attention of the Sanitary and Phytosanitary Standards (SPS) and Technical Barriers to Trade (TBT) WTO Committees in the period from 1995–2009 (Young 2009).

Second, scholarly research has so far been largely unable to develop systematic explanations for how governments choose whether or not to file a dispute with the WTO DSM. This is an important research question that connects the question of first order compliance to the question of second order compliance. Assessing the WTO's performance in terms of incentivising first order compliance is important not only in itself, but also because it helps establish a better empirical grounding for the analysis of second order compliance. Indeed, understanding the politics of dispute initiation is crucial to shed light on the missing link between research on first and second order compliance. Once the overall degree of (dis)respect for WTO rules is known, and before addressing the question of compliance with the adjudicative body of the WTO, we need to understand whether, and eventually how, access to WTO adjudication is hampered in systematic ways. In principle, any move towards a rule-based system can be expected to provide an essential public good: levelling the playing field to make sure that all stakeholders (e.g. WTO members and different actors within WTO members) are not systematically denied the opportunity to see their rights enforced through legal means. However, in practice, several factors can hinder the capacity of the WTO DSM to contribute to the attainment of this essential public good. For instance, weak states might not be able to bring legal claims to challenge violations of their rights, or they might face constraints in doing so against powerful countries. A closely related question concerns whether the WTO's DSM is activated to challenge WTO-illegal policies that affect only a narrow subset of WTO members or policies that have negative effects for the majority of WTO members. An additional problem concerns the potential bias in the representation of different constituencies within WTO members, rather than across them. For instance, the WTO's DSM could be used to defend a restricted set of domestic constituencies representing concentrated and narrow interests, leading to the underrepresentation of other important but

more diffuse interests. To sum up, while in principle a move towards a rule-based system should be expected to provide the public good of equitable access to enforcement, in practice such a move may simply reinforce existing power asymmetries and political biases that lead to the systematic exclusion of some sets of actors from the scope of WTO's ability to incentivise second order compliance.

More generally, a number of striking regularities remain largely unexplained because of the tendency not to systematically analyse non-cases in WTO dispute settlement. For instance, the EU and the US have never initiated complaints against least developed countries (LDCs) (Horn, Johannesson and Mavroidis 2011); LDCs tend to prefer to participate as third parties in WTO dispute settlement rather than as complainants (Elsig and Stucki 2012); there has been only one dispute settlement ruling on whether a bilateral or regional preferential trade agreement (PTA) conforms to WTO rules (Mavroidis 2006), and WTO agreements covering a broad range of regulatory policies such as the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the General Agreement on Trade in Services (GATS) only rarely prompt dispute settlement cases (Pauwelyn 2010).

1. Identifying the universe of potential cases in WTO dispute settlement

The challenge in providing a more reliable empirical assessment of the WTO's ability to incentivise first order compliance with its rules, as well as in gaining a comprehensive understanding of the degree to which trade-related actors can take the opportunity to compel others into second order compliance through the adjudicative institutions of the WTO, is to identify the universe of measures and policies that are in potential conflict with WTO commitments. But how can we collect systematic information on such potential WTO disputes? Acknowledging that it is virtually impossible to collect data on all policies or measures potentially in conflict with WTO law in all WTO members, the question is how best to obtain a representative sample of the universe of potential WTO disputes. Some studies have defined the universe of potential trade disputes by way of an estimation based on trade flows between pairs of trade partners, making the assumption that the number of potential disputable issues should increase with greater trade (Sattler and Bernauer 2011). While in the absence of viable alternatives estimation can certainly help in identifying a benchmark for the potential for trade disputes, it necessarily remains an imprecise guess that again risks leading to partial inferences in the best case scenario, or to entirely incorrect ones in the worst case scenario.

A number of alternatives are available in the field of WTO dispute settlement research. Although clearly more time consuming, in our view a more interesting route is to actually try and empirically trace potential WTO disputes. Some studies have adopted this approach focusing on temporary trade barriers (TTBs) such as anti-dumping measures and countervailing duties (Allee 2005; Bown 2005; Kim 2008). While this approach offers the considerable advantage of allowing for the identification of the full sample of potentially WTO-incompatible trade measures, i.e. we can identify all the TTBs that have been put in place, it does not allow for generalisations beyond this particular set of trade measures.

Another approach is to rely on WTO members' notifications or measures raised as specific concerns to WTO technical committees (Young 2009). This approach also seems problematic for a number of reasons. Notifications are made by national administrations and it is clear from patterns of self-reporting that not all WTO members comply with their notification obligations. Specific concerns raised to WTO technical committees are also problematic in that they may already represent a subset of politically relevant potential trade barriers as a result of the gatekeeping power trade policy officials exercise in selecting issues to be brought to the attention of such committees. More generally, these data are only available with respect to two sets of WTO commitments, SPS and TBT, and it is therefore difficult to advance generalisable arguments.

In our view, the most promising way to acquire reliable and comprehensive evidence on first order compliance is to concentrate on potentially WTO-inconsistent policies and measures abroad that are brought to the attention of WTO members' policy officials by domestic exporters. Our point of reference here is the impressive study conducted by Christina Davis (2012) on the determinants of dispute initiation in the US and Japan in which she systematically collected data on such potentially WTO-inconsistent policies and measures by relying on the *National Trade Estimate Report on Foreign Trade Barriers* and on the *Report on Compliance by Major Trading Partners with Trade Agreements* both published annually by the US Trade Representative and the Japanese Government respectively. Such an approach offers a number of advantages. For one, it allows the focus to be put on potentially WTO-inconsistent policies that are politically relevant, namely those that are relevant enough to have engendered organised groups within (potential) WTO complainants to mobilise and ask their government to act on their behalf. Moreover, these reports include all kinds of potentially WTO-inconsistent policies and measures, and are therefore not restricted to any particular WTO commitment. One of the drawbacks of such an analysis is that it covers a limited time-span, i.e. 1995–2004, and is limited to only two WTO members.

This pioneering work could fruitfully be expanded in both respects. Since such reports, as well as data on economic indicators, are now available up to 2015, it would be possible to cover a period of two decades (1995–2015), a period long enough to also understand in a systematic way the effects of the 2007–2008 financial crisis on first order compliance in the WTO. A greater challenge is to expand the analysis to a much larger set of WTO members, as the vast majority of them do not have at their disposal formalised mechanisms for market access investigations like the US and Japan do. Some other important WTO members, however, do have such mechanisms. For instance, since 2009, the European Commission has published an annual *Trade and Investment Barriers Report*. Data on barriers to trade and investment faced by EU exporters prior to 2009 can be retrieved from the *Market Access Database* of the European Commission. This is a publicly available computer database on export formalities, WTO bound tariff levels, and existing barriers to trade. This database forms the informational backbone of the EU's litigation strategies in the WTO since it establishes a systematic and centralised source of information on market access difficulties encountered by EU industry. Similar data will soon be available for South Korea, as the South Korea Ministry of Trade, Industry & Energy (MOTIE) and the Ministry of Foreign Affairs (MOFAT) initiated a jointly published *National Report on Foreign Trade Environment* in 2013. While to our knowledge these are the only WTO members that have equipped themselves with formalised mechanisms for market access investigations, in other members organisations representing sectoral interests do produce annual reports. For instance, while Brazil is still in the process of developing its formal institutional mechanisms, business organisations representing various industry sectors produce informal lists of foreign trade barriers they would like to see their government act upon through WTO litigation. Such data are broadly comparable with previous government-based data as in both cases reports collect complaints about potentially WTO-incompatible policies and measures by organised non-state actors.

II. Potential determinants of dispute initiation in the WTO

So far, we have assessed possible empirical strategies to confront the challenges of understanding first order compliance. Once such WTO-incompatible policies and measures have been identified, the next logical step is to investigate what drives policy-makers' choice to use WTO adjudication. The degree of second order compliance is crucial in assessing the performance of the WTO's enforcement capacity, but, logically, before the question of compliance with WTO DSM rulings can be answered, it is necessary to address the issue of

access to adjudication. Neither practitioners nor scholars have been at all short of ideas as to the possible sources of dispute initiation. We review some these ideas here and suggest possible ways to expand the scope of these analyses.

To account for differences in dispute initiation *across* countries, some authors have concentrated on WTO members' legal capacity (Kim 2008; Busch, Reinhardt and Shaffer 2009). Taking legal action in the WTO can be very costly because it requires continuous monitoring of other countries' trade policies and import restrictions, collection of evidence on policies and practices that violate international trade law, and, most importantly, hiring legal staff for disputes that often last for some years. Following through with a WTO dispute thus requires that WTO members have the capacity to meet the administrative and expertise requirements for preparing and following WTO proceedings. Given the high costs associated with WTO litigation, poor countries that have less financial and human resources may find it harder to resort to WTO litigation than rich ones. While previous experiences of WTO litigation can help poor countries overcome some of these problems (Davis and Bermeo 2009), overall, poor countries can be expected both to initiate fewer disputes than rich ones, and to be more likely to participate in WTO dispute settlement as third parties (Elsig and Stucki 2012).

Legal capacity, however, can tell us little about how the logic of dispute initiation may vary *within* WTO members. Drawing on the work of Sattler and Bernauer (2011), a number of interesting hypotheses on how policy-makers choose their targets in WTO litigation can be identified. For instance, dispute initiation can be thought of as a function of power asymmetries between WTO members. The logic of this argument is that if the potential complainant is much more powerful, i.e. has a larger market size than the potential defendant, it is more likely to get what it wants, i.e. the removal of trade barriers, through bilateral interactions before a dispute is initiated because it can threaten to impose greater costs on the target with limited harm to its own economy (Guzman and Simmons 2005). The probability of an out-of-court settlement thus increases with larger power asymmetries since more powerful complainant countries are more likely to succeed in getting the potentially disputed trade restrictions lifted without resorting to WTO proceedings.

As Sattler and Bernauer (2011) point out, dispute initiation can also be affected by a gravitational logic driven both by economic size and trade volumes. This line of argument essentially applies gravity models of inter-state conflict to trade disputes (Horn, Mavroidis and Nordström 1999), by arguing that large economies attract a disproportionate amount of disputes. This may be so for two reasons. For one, large economies are particularly attractive

targets for potential complainants because of their large market size, which ultimately affects the economic stakes of a case (Allee 2005; Guzman and Simmons 2005). If the WTO rules in favour of the complainant, exporters from the complainant country can gain more when the destination market is larger. The incentive to take legal action can therefore be expected to be particularly strong when suspected violations of international trade law occur in a large economy. Large trade volumes increase these incentives for the simple reason that a large exporting country will be more likely encounter disputable trade restrictions in some other country. In other words, large volumes and a wide diversity of trade flows existing between two large and interdependent trade partners increase the probability that one of these trade partners will be negatively affected by an import-restricting measure and decide to challenge this measure at the WTO.

These arguments do not systematically take into account the domestic politics of trade policy-making, however. Davis (2012) suggests that this gap can be addressed by conceiving of dispute initiation as a function of the political pressure exerted on WTO members' policy-makers by powerful exporting constituencies. This pressure argument builds on classical political economy approaches that see government choices of economic policies as a function of political pressures exerted by key economic interest groups within society (Frieden 1991). According to this perspective, governments use WTO litigation to target those trade barriers that impose costs on exporters that can affect their chances of re-election or re-appointment. This perspective suggests that public policy-makers will be more responsive to demands being pushed by domestic interests groups who have a strong capacity to mobilise politically and exert pressure on them, offering resources that are key for policy-makers in exchange for policies that they desire. One of the main challenges here is to devise empirical strategies to conduct meaningful comparisons between WTO members. Davis (2012) analyses governmental choices on dispute initiation in the US and Japan by measuring interest groups' lobbying in terms of political contributions. This approach can be problematic when it comes to testing the same hypothesis in other WTO members. For instance, data on interest group spending may not be systematically collected, or direct campaign contributions by firms can be forbidden, as in the case of the EU and most of its member states. The challenge here is to identify measures that can grasp the logic underlying the pressure politics hypothesis while allowing for meaningful comparisons across WTO members. One possibility could be to rely on the Herfindahl-Hirschman Index (HHI), which measures the size of firms in relation to the industry size and indicates the level of competition among them, thus directly speaking to

theories of collective action, which suggest that highly concentrated sectors should find it easier to mobilise politically.

In our view, looking at an additional set of hypotheses could usefully expand upon this important work. For instance, it would be interesting to subject to empirical scrutiny the argument that the domestic political logic driving dispute initiation may be affected by the extent to which WTO dyads are engaged in intra-industry trade (IIT). This hypothesis posits that IIT, i.e. trade of varieties of the same product between countries with similar factor endowments, makes collective action easier because it makes firms or agglomerations of firms leading actors in their market niche. While on the one hand, IIT reduces the costs of trade relative to inter-industry trade, on the other hand, it significantly reduces collective action costs. The costs of adjusting to IIT may be lower, and yet they are not concentrated in a single social class or in a single industry. Rather, a small set of hyper-specialised producers, or even a single firm carry the burden. Because IIT leads firms to act more individually or in small groups (rather than collectively within or across sectors), trade policy lobbying is likely to be easier to organise effectively. Since firms consider the expected benefits and costs of lobbying, as well as the likelihood that their individual and joint efforts will have an impact on policy outcomes (Olson 1965), IIT can be expected to ease political mobilisation (Gilligan 1997). By extension, one can hypothesise that high levels of IIT generated between two WTO members may increase the ability of organised exporters to successfully pressure their government into WTO litigation.

Another important factor influencing WTO members' choice as to dispute initiation may be related to the type of policy measures that can be targeted through WTO litigation. In their impressive analysis of WTO disputes, Bown and Reynolds (2014) show that some policies targeted through WTO dispute are 'partial' – i.e. they affect only the complainant or a small subset of actors – while others are 'global' – i.e. they negatively affect all trading partners. Examples of the former type of WTO disputes are those that question the WTO-compatibility of anti-dumping measures or other safeguard measures, while examples of the latter include WTO-inconsistent applications of an internal tax, subsidy, or regulation imposed on a most-favoured-nation (MFN) conforming basis. This means that some trade disputes generate benefits that are appropriated by one or a small subset of WTO members, while others promise to generate benefits that can be appropriated by WTO members more widely. It is quite plausible to hypothesise that there is a lower probability of initiation of 'global' WTO disputes given the incentives for free-riding that might arise when such challengeable policy measures are at stake.

Finally, it might be worthwhile exploring whether the probability of dispute initiation decreases when the two potential disputants are partners in a preferential trade agreement (PTA) with a highly legalised dispute settlement mechanism. This alternative forum hypothesis holds that the availability of alternative fora for discussion about the elimination of trade barriers makes WTO litigation less likely (Busch 2007). The number of PTAs has skyrocketed in the past two decades and recent research has shown that one of the most striking features of the current wave of regionalism is the increasing presence of enforcement mechanisms in such PTAs (Dür and Elsig 2014). Other things being equal, it is just plausible that the likelihood of dispute initiation in the WTO is lower when the two potential complainants have an alternative forum at their disposal, i.e. a dispute settlement mechanism in the PTA to which both are signatories, to settle the controversy.

C. Melting the tip of the iceberg: what favours timely resolution of actual WTO disputes?

Having addressed the issue of first order compliance and dispute initiation, we now turn to the question of second order compliance. Scholarly literature by political scientists has put forward a series of theoretical explanations for members' behaviour in WTO litigation and (non)compliance in the tradition of institutionalism in international relations. Although compliance is an essentially contested concept, this literature generally understands compliance to mean bringing rules and practices in line with WTO law once they have been found to pursue WTO-inconsistent policies by the WTO adjudicative body, and meeting the complainants' demands (for an elaboration on the second aspect, see more below). One of the reasons why compliance according to the first meaning of the word is bound to remain elusive to any analysis, is that information on early settlements in the form of mutually agreed solutions most often remains private to the disputing parties and the extent to which settlements actually result in compliance with WTO law remains unclear (De Bièvre and Poletti 2015; Mavroidis 2015). Nevertheless, this literature on possible political determinants of compliance has focused on two broad sets of explanatory factors. First, some scholars have proposed that states' propensity to comply with their international trade commitments can be explained by either the normative pressure applied by the international community that challenges the reputation of a state (Keohane 1984; Zangl 2008) or the pressure exerted by the retaliatory capacity of trade partners (Bown 2004). A second strand of the literature makes the alternative suggestion that political traits of states themselves can account for the variation in

second order compliance. Such traits include the defendant's political regime and the presence of democratic institutions (Slaughter 1995) as well as the number of domestic veto players whose consent is necessary to secure domestic policy change (Young 2010; Poletti and De Bièvre 2014).

Scholars who focused on the impact of external pressures firstly argued that the normative power of a dispute settlement panel ruling – and the panel's legally binding recommendations – compels states to comply, as rule abidance becomes a norm that the world trade community members are expected to follow (Busch and Reinhardt 2000). Secondly, some further argued that domestic reputational concerns arise if states decide to renege on their international commitments, mainly in the form of audience costs that may damage states' reputation globally. Domestic audience costs may arise since citizens tend to care about their country's international reputation as well as the reputation of a leader in global fora (Tomz 2007). Thus, the potential for damage to a state's reputation on the international scene may well restrain states from ignoring their commitments, and induce to them to follow through on their promises (Fearon 1994). Furthermore, audience costs may also arise because of the presence of third parties at the WTO dispute settlement – effectively observers to the judicial proceedings – who may trigger additional concerns for defendants who would not want to risk their reputation in the eyes of those scrutinising their behaviour. Yet it has also been suggested that the presence of third parties prevents WTO members from reaching a mutually agreed solution through the WTO DSM by increasing bargaining costs and thus lowering the prospects of settlement (Busch and Reinhardt 2006; Johns and Pelc 2014). At the same time, more egregious violations of WTO law may well attract more third parties to want to attend the proceedings, challenging the basis for causal inferences about this alleged detrimental effect of third party presence on compliance.

Apart from reputational concerns that may prevent states from reneging on their international commitments, scholars also argued that complainants' retaliatory capacity induces compliance with the WTO DSM. While some argued that the threat of authorised trade sanctions put pressure upon defendant states to ensure compliance to avoid economic costs of reneging (Bown 2004; Bown and Pauwelyn 2010), others emphasised that the threat of retaliation creates an incentive for the domestic pro-trade groups to overcome their collective action problems and mobilise in favour of compliance and trade liberalisation (Goldstein and Martin 2000; Goldstein and Steinberg 2008). Others have also argued that the threat of retaliation can be especially effective in promoting compliance where the disputing

parties have large power asymmetries, i.e. where a more powerful complainant could impose its will upon a weaker defendant (Guzman and Simmons 2005).

Two additional sources of compliance may well warrant attention, but have not been subjected to precise empirical scrutiny so far. Firstly, based on a general conjecture on interdependence, *the dyadic trade relationship* between a complainant and a defendant may have the potential to affect a dispute's timely and effective resolution. We can reasonably expect disputes to be resolved faster and more effectively if the defendant and the complainant engage in extensive bilateral trade, because they are likely to be willing to avoid any disruption to their trade relationship (Bown 2009). Secondly, compliance at the WTO could also be more likely if the complainant and the defendant are part of a military pact or, even more plausibly, a trade alliance in the form of a PTA, since such partnerships may induce states to avoid conflict with their exclusive partners.

An alternative strand of the literature has argued that a state's rule abidance record is affected by factors particular to that state. As international institutions are designed to affect the behaviour of governments (Kennedy and Southwick 2002), the domestic actors to which the governments are accountable may play the most decisive role in determining the government's behaviour. Two arguments have been put forward in this regard. The first posits that more democratic states are more likely to comply with their international commitments, and the second argues that the higher the number of legislative veto players whose consent is necessary to bring about policy change, the more difficult it is for states to comply—especially within democracies.

The assertion that international commitments are more likely to be honoured by democratic states constitutes an extension of theories of the so-called democratic peace. However, they locate the cause of this pressure in the properties of democracies or the activities of constituencies within these states, rather than the mere interaction between states at the international level (Dixon 1993; Milner and Moravcsik 2009). The underlying reasoning rests on the supposed dedication of democratic states to the rule of law and their tendency towards abidance with international rules stemming from local democratic values (Slaughter 1995). Others have suggested that democracies are more compliant because democratic systems are accountable to their domestic constituencies (Mansfield, Milner and Rosendorff 2002). Therefore, if a democratic state made an international commitment – supposedly in the interests of its domestic audience(s) – it is reasonable to expect it to follow through on its promise and satisfy the demand of those domestic constituencies.

However, some have argued instead that the notion of accountability is exactly why second order compliance following WTO disputes may be difficult. If policy-makers are assumed to be accountable to their domestic constituencies, they would be susceptible to the pressure of domestic mobilised actors, who may or may not be in favour of compliance. By conceiving governments as gatekeepers in trade disputes, some have argued that policy-makers attempt to steer a course between two balancing pressures from domestic mobilised actors – e.g. economic sectors – in bringing compliance following WTO disputes (Spilker 2012). For instance, in response to an adverse panel ruling, defendant's domestic sectors characterized with high import-dependence would be in favour of compliance and ask to remove trade barriers to access cheaper imports. In contrast, import-competing sectors affected by such disputes would instead press for protection in order to continue being shielded from foreign competition. Yet, only a small proportion of WTO dispute settlement cases lends itself to such a reading, as most tend to be resolved at an early stage.

Similarly, there have also been suggestions that regardless of the democratic nature of the state parties, and beyond the preferences of domestic actors, the number of veto players whose consent is necessary to enact policy change co-determines states' capacity for compliance (Young 2010; Poletti and De Bièvre 2014). In this vein, it is argued that the variation in responses to WTO litigation depends on the number of veto players in the defendant – highlighting that a high number of domestic veto players can significantly hamper WTO members' ability to comply with WTO rules, even when policy-makers are willing to do so.

I. Current challenges and ways forward

These plausible explanations have greatly advanced our understanding of second order compliance with the WTO DSM. Yet the literature on compliance published so far has empirical and conceptual shortcomings. In their empirical approach, the most prominent works have often focused on small-n samples or high-profile non-compliance cases, mainly transatlantic disputes (Busch and Reinhardt 2003; Zangl 2008), comparative case studies (Young 2004; Busch, Reinhardt et al. 2009; Young 2010; Young 2011; Poletti and De Bièvre 2014) or have limited their study to a particular time period or subject matter of a dispute (Spilker 2011). Where an attempt has been made to identify a relationship between the aforementioned explanations and states' record of abidance with the rulings of the WTO, it has remained somewhat puzzling that many of the most active users of the system consistently resist compliance (Pauwelyn 2000; Davey 2007). In particular, the hypotheses following in the tradition of democratic peace theory do not withstand rigorous testing, as numerous democratic WTO members, such as Norway, Canada, the US and Australia have compliance problems, while their authoritarian counterparts, for example China, have shown willingness to comply (Harpaz 2010).

Moreover, the exact conceptualisation and the empirical measurement of compliance with the WTO DSM remains somewhat problematic. Whereas a large majority of scholars follow Hudec (1992) in measuring second order compliance by looking at the policy change in a defendant state following a WTO panel ruling (Busch 2000; Guzman and Simmons 2002; Busch and Reinhardt 2003; Petersmann and Pollack 2003; Young 2004; Busch and Reinhardt 2006; Zangl 2008; Young 2010), this approach does not provide a comprehensive evaluation of the performance of the WTO DSM in bringing about the swift resolution of disputes. Yet the inherent instability of the seemingly obvious concept of compliance with WTO law can be overcome by conceptualising compliance pragmatically as a defendant *meeting a complainant's demands*. This opens up the possibility to investigate how long complainants viewed defendants as being in violation of their WTO commitments before the defendant enacted (or revised) its policy. Existing studies have thus often overlooked an important variation in the time it takes for defendants to bring their policies into line with their WTO commitments. Even though the large majority of WTO disputes do indeed result in compliance, such rule abidance might actually come about after a consistent violation for a long period of time – as in the case of the EU's bananas dispute with Latin American countries or the US's upland cotton dispute with Brazil.

To account for these challenges, we offer empirical and conceptual alternatives. From an empirical standpoint, it may prove useful to assess whether a delay in compliance with WTO rulings may be explained by factors that the political economy of trade literature has paid great attention to in recent years, yet surprisingly little with regard to WTO dispute settlement. Indeed, considerable variation in trade policy preferences, political mobilisation and trade policy outcomes may be attributable to the extent to which sectors (and firms) are active in so-called global value chains (GVCs), which are networks characterised by internationalisation and vertical integration of production processes. Thus, the degree to which firms and sectors in a complainant and a defendant member are involved in a WTO bilateral dispute may well affect timeliness of compliance. Firms and sectors embedded in GVCs have been demonstrated to press for PTAs (Manger 2012) and have been found to be associated with significantly lower demand for trade protection (Dür, Baccini and Elsig 2014). Since it is likely that GVC integration stimulates bilateral trade liberalisation (Antràs and Staiger 2012; Orefice and Rocha 2014) as it activates political mobilisation by import-dependent firms and sectors, different degrees of GVC integration might well shape domestic firms' and sectors' preferences towards (not) liberalising and (not) complying with WTO rulings. The level of integration of domestic actors into GVCs could constitute a more parsimonious and simpler explanation of states' compliance with the international trade agreements of the WTO.

At the same time, the very rise of GVCs may be just as likely to reduce the incentives for governments and domestic interests to put into place or maintain trade barriers that are not in conformity with one or more of the WTO's agreements. Those same pressures that may favour more timely compliance with WTO rulings should logically work just as well under the mere threat of WTO litigation, or should even make the very emergence of such trade barriers less likely in sectors characterised by a high degree of integration into GVCs. However, in order to advance and test such propositions, different degrees of integration into GVCs would need to be operationalised and rigorously measured to pave the way to understanding the changing nature of conflict and cooperation in the international trade regime.

Two sources of evidence could be very helpful in this regard. Firstly, researchers can now use the European Commission sponsored *World Input–Output Database* (WIOD), which has sector-level trade data on almost all OECD countries for the past 20 years and provides a number of GVC indicators, the most important being the level of value added trade and the intermediate consumption of every sector (Timmer et al. 2015). Scholars can use this dataset

to gauge the level of import dependence of sectors by calculating the ratio of intermediate consumption to the whole sector's output. They can also use it to gauge sector productivity by calculating each sector's value added trade as a ratio of its total output. Secondly, as already mentioned, the World Bank-sponsored *Trade Flows and Trade Disputes* database, compiled by Bown and Reynolds (2014), offers impressive trade data about every WTO dispute. Beyond descriptive data on all (more than 400) disputes brought to the WTO, such as dispute initiation and the DS number of the disputes, allowing for inferences on the entire population of actual WTO disputes, the database includes trade volumes between defendants and complainants (from two years before dispute initiation until a year after dispute resolution), the 6-digit Harmonized System (HS) codes for products associated with each dispute, and a dichotomous measure of whether the allegedly inconsistent policy is a global or a partial one – i.e. a policy imposed on a subset of the defendant's trade partners. The dataset thus allows one to operationalise a defendant's level of vulnerability towards its trade partners by looking at the level of imports and exports at the 6-digit HS level, and perhaps to observe the change in trade volumes between a defendant and a complainant before and after a dispute is resolved.

The empirical opportunities brought about by the construction of this database could thus be fruitfully accompanied by conceptual clarification on definition and measurement of compliance. Indeed, one way to remedy some of the above-mentioned problems with the literature is to measure compliance with the WTO DSM by looking at *how long* it takes for defendants to meet their international obligations, and conceptually equate compliance with *meeting a trade partner's demands*. In our view, measuring compliance by considering the aspect of *timeliness* provides the best alternative because it allows researchers to observe for how long the defendants resist compliance before satisfying complainants' demands, and then to look for factors to account for this variation. Moreover, instead of attempting to assess whether a defendant's enacted (or revised) policy after an adverse panel ruling is consistent with WTO law, conceptualising compliance as meeting a trade partner's demands would be more advantageous because a dispute is only taken off the agenda of the DSB when the complainant concerned is satisfied with the implementation of a ruling or there is a mutually agreed solution – except in *very* rare cases where a compliance panel disagrees with a complainant. Therefore, in most cases, even though the defendant may not necessarily be in strict 'compliance' with WTO law, the WTO DSB considers the case resolved and settled when a complainant is satisfied one way or another. In other words, since the reliable and comprehensive determination of (partial or full) compliance with WTO DSB rulings for the

entire population of WTO dispute settlement cases may well be elusive, compliance might be more usefully conceptualised and investigated as the resolution and settlement of a dispute whenever a complainant is satisfied with the defendant's response.

Furthermore, for calculating the time it takes for defendants to meet their trade partner's demands, two options with different conceptual implications are available. Firstly, one can calculate the time from dispute initiation until dispute resolution – regardless of whether the dispute was resolved by early settlement or by domestic policy change after a panel ruling. The downside to this approach is that defendants are implicitly considered 'guilty' or unable to satisfy their trade partners' demands until there is a settlement (or a domestic policy change) that brings about compliance. Clearly, in certain cases, defendants may attempt to clarify the WTO-inconsistent policies by bringing disputes to the panels, or may attempt to prove that their policies are not in violation of any WTO law, which is admittedly very rare but occurs nevertheless – as with the asbestos dispute brought against the EU by Canada. To sum up, calculating the time it takes for defendants to meet their trade partners' demands, from dispute initiation until dispute resolution still has the advantage of offering a coherent and simple conceptualisation, while bearing in mind the underlying assumptions of such an approach.

An alternative approach would be to calculate timeliness separately for disputes that were settled and for disputes that were empaneled. For the disputes that resulted in a mutually agreed solution, one could calculate the time from the initiation of the dispute until the date of its settlement. This would reveal how long it takes a defendant to satisfy its trade partner by offering a settlement. For the empaneled disputes, one option would be to calculate the time it takes a defendant to implement a panel ruling after the adoption of a final panel report, which would reveal the time it takes for a defendant to change its domestic policies to meet its trade partner's demands. The advantage of this approach is that it takes into account the certainty of violation from a defendant's perspective. In other words, taking this approach, defendants would clearly know which parts of their allegedly inconsistent policies need to be corrected – if any. However, this would also mean that any examination that uses this approach separates compliance with panel rulings from compliance in the form of settlement. This in turn would mean neglecting the variation in the defendant behaviour towards prolonging a dispute. The defendants at the WTO DSM may very well be prolonging disputes, either because they are unable to meet their trade partners' demands – e.g. because domestic veto players inhibit states' ability to enact new policies – or because they want to appease their domestic pro-

protectionist constituencies by signalling commitment to their interests in the form of non-compliance.

D. Conclusion

In this chapter, we have presented an overview of existing arguments and research on the performance of the WTO in inducing first and second order compliance with WTO law. A comprehensive understanding of the performance of the WTO DSM in inducing compliance has to come to terms with both the degree to which WTO members conduct trade policies that are in line with their commitments under WTO law and the degree to which members bring their policies into line after they have been challenged by a trade partner and/or ruled upon by the WTO DSB. In this literature review with a research outlook, we have sketched the state-of-the-art of the political science and political economy literature on this topic of great importance to the stability and predictability of the world trading regime, while highlighting some of the challenges ahead.

For one, the identification of economic and political sources of dispute initiation at the WTO has to confront the tip of the iceberg issue. This refers to the question of which potential disputes might never come to the water's surface, and which subset of those surface as the tip of the iceberg, i.e. which cases WTO members actually table as disputes in Geneva. Whereas identifying such a universe of potential cases is inherently difficult and incomplete, a feasible and reliable empirically grounded way of approximating this universe is to rely on evidence collected by WTO members on trade barriers and impediments abroad. This should inform us on the systematic causes of initiation and non-initiation of WTO disputes.

Second, there is the question of compliance in actual dispute settlement cases, i.e. whether or not members bring their policies into line with complainants' demands and/or the rulings of the DSB, and is thus concerned with the melting of the tip of the iceberg, i.e. the actual dispute settlement cases. While compliance is an essentially contested concept with an inherently unstable meaning, we have argued that for empirical research purposes, it is very useful to conceptualise it simply as meeting a complainant's demands, and to gauge the potential causes for swift resolution of disputes at the WTO.

While we have restricted our coverage of existing literature and our speculation about possible ways forward, the results coming out of this rich literature should also be able to inform us about the performance of compliance and enforcement institutions in PTAs. Increasingly being part of such agreements, but as yet attracting relatively few formal dispute settlement cases, the judicial institutions being put into place in PTAs might well be

understood and explained with the help of the conjectures and findings that research on WTO dispute settlement has already generated.

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