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Working Paper

In the Shadow of the DSU: Addressing Specific Trade Concerns in the WTO SPS and TBT Committees

IFN Working Paper, No. 960

Provided in Cooperation with:

Research Institute of Industrial Economics (IFN), Stockholm

Suggested Citation: Horn, Henrik; Mavroides, Petros C.; Wijkström, Erik N. (2013) : In the Shadow of the DSU: Addressing Specific Trade Concerns in the WTO SPS and TBT Committees, IFN Working Paper, No. 960, Research Institute of Industrial Economics (IFN), Stockholm

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In the Shadow of the DSU: Addressing Specific Trade Concerns in the WTO SPS and TBT Committees

**Henrik Horn, Petros C. Mavroidis and
Erik N. Wijkström**

In the Shadow of the DSU: Addressing Specific Trade Concerns in the WTO SPS and TBT Committees*

by

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8 March 2013

ABSTRACT

The paper argues that focusing only on disputes *formally raised* in the WTO Dispute Settlement system underestimates the extent of trade conflict resolution within the WTO. Both the SPS and TBT Committees address a significant number of 'specific trade concerns' (STCs) that in the overwhelming majority of cases do not become formal disputes. The STCs address differences between Members concerning the conformity of national measures in the SPS and TBT areas with these agreements. It appears as if Committee work on STCs significantly helps defuse potential trade frictions concerning national policies in the covered areas.

JEL Classification: F13, K32, K33

Keywords: WTO, specific trade concerns, SPS and TBT Committees, dispute settlement

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* We are grateful to participants in Entwined workshops for helpful comments on previous drafts, to Jagdish Bhagwati, Bernard M. Hoekman, Rob Howse, Gretchen Stanton, Robert Wolfe and Devin McDaniels for useful discussions. Louise Johannesson provided superb research assistance, as always. Horn and Mavroidis gratefully acknowledge financial support from Mistra, Stockholm, and Horn also financial support from the Marianne and Marcus Wallenberg Foundation.

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1 Introduction

A central task of the WTO TBT and SPS Committees is to administer ‘specific trade concerns’ (STCs) that Members raise before them. STCs are not formal disputes in the legal sense of the term, i.e., they are not disputes raised before Panels/AB as per §1 of the Dispute Settlement Understanding (DSU). They are not even the necessary *ante-chambre* for lodging a dispute under the proceedings of the DSU, since Members do not have to bring their concerns to the Committee before lodging a formal DSU dispute. Members can bring STCs simply to seek information concerning other Members’ national measures in the areas covered by the Agreement on Technical Barriers to Trade (TBT), or the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS). But STCs also very often address divergences of views between Members regarding the consistency of national measures in SPS and TBT areas with these agreements. By raising STCs, Members often are not only requesting information or clarification; they also send a strong signal that they already have reasons to believe that obligations under the agreements have not been met.

The purpose of the paper is to argue that this work on STCs is *akin to an informal form of resolution of trade conflicts* that operates in parallel to the Dispute Settlement mechanism and covers a broad range of non-tariff barriers of a regulatory nature. The paper sheds light on the nature and quantitative importance of this mode of conflict resolution. Based on the fact that several hundred STCs of this nature have been discussed since 1995, we conclude that the STC mechanism significantly contributes to defusing trade tensions in the SPS and TBT areas. Although it is difficult to point to the specific reasons why the Committees have been successful in this regard, we argue that its practical, expert driven approach is most likely one important contributing factor.

It should be emphasized that the interpretation of the Committee work on STCs as means of resolving trade conflicts is not self-evident: the Committees are formally only fora for Members to share knowledge about each other’s policy measures in the SPS and TBT areas. But there are at least two reasons why we believe it is appropriate to

describe the Committees work as actually resolving trade conflicts. First, in the SPS area many STCs are reported officially as 'partially resolved' or 'resolved'; the absence of an explicit reference to 'resolutions' on the TBT side has not hindered 'settlements' on that area as well, as we will argue infra. Second, in both the SPS and TBT areas, a large number of STCs have been discussed in several meetings, e.g. they are not mere requests for clarification, to eventually disappear from the agenda. These issues are very rarely subsequently raised as formal disputes under the DSU. It appears hence, that the Committees effectively contribute to defusing or preempting these conflicts between WTO Members.

Section 2 provides background information concerning the Committees. Section 3 focuses on the key instrument for ensuring transparency in both Committees: 'notifications'. Section 4 examines basic features of the two Committees' handling of STCs. It discusses the use of the STC mechanism over time, characterizes the type of Members that raise and respond to such concerns, and it shows that a significant part of these STCs address measures that are about the protection of human health or safety, or the protection of the environment. Section 5 focuses on the extent to which STCs are 'resolved'. Section 6 concludes.

2 The Role of the SPS/TBT Committees

This Section briefly discusses the institutional role of the SPS and TBT Committees within the WTO.

2.1 The Discipline in Brief

The TBT and SPS agreements seek to strike a balance between the WTO Members' *right* to take measures for the achievement of legitimate policy objectives (such as the protection of human, animal or plant life or health or the protection of the environment) and the need to *discipline* this right in order to avoid the emergence of unnecessary trade barriers. Measures need to be non-discriminatory and necessary to achieve the stated objective; in the SPS context, Members need, in principle, to base their measures on science, and they also need to be consistent when formulating and applying measures coming under the purview of this Agreement. The two agreements do not impose

common policies on Members, but there is a strong encouragement for WTO Members to use international standards as a basis for regulation. There is a presumption (rebuttable) that if a Member bases its measure on an international standard it is not creating an unnecessary barrier to trade.

The scope of measures covered by the two agreements is wide. The TBT Agreement applies to regulatory non-tariff measures: these measures are referred to as 'technical regulations', 'standards', and 'conformity assessment procedures'. SPS measures address a set of specific risks that international trade brings to human, animal and plant life or health.¹ There is no overlap between the Agreements with regard to scope, i.e., a given measure cannot be covered by both agreements.²

Both industrial and agricultural products fall within the scope of the TBT and SPS Agreements. But in practice there is a strong dominance of agricultural products in the SPS area: for instance, 94% of all products addressed in trade concerns raised before the SPS Committee affect trade in agricultural products.³ This reflects the fact that the SPS Agreement is focused on risks related to food safety, plant and animal health – and that the Agreement was, at least to some extent, negotiated to ensure that concessions made on domestic support and market access under the 1995 WTO Agreement on Agriculture would not be undermined by other types of non-tariff barriers. For the TBT Agreement, about 30% of the products affected by trade concerns raised for discussion

¹ These are measures applied to address risks: (i) to protect animal or plant life or health within the territory of the Member from risks arising from the entry, establishment or spread of pests, diseases, disease-carrying organisms or disease-causing organisms; (ii) to protect human or animal life or health within the territory of the Member from risks arising from additives, contaminants, toxins or disease-causing organisms in foods, beverages or feedstuffs; (iii) to protect human life or health within the territory of the Member from risks arising from diseases carried by animals, plants or products thereof, or from the entry, establishment or spread of pests; or (iv) to prevent or limit other damage within the territory of the Member from the entry, establishment or spread of pests. A footnote to the word 'Definitions' in Annex A of the SPS Agreement states that for the purpose of these definitions, 'animal' includes fish and wild fauna; 'plant' includes forests and wild flora; 'pests' include weeds; and 'contaminants' include pesticide and veterinary drug residues and extraneous matter (SPS Agreement, Annex A, Definitions, para 1).

² TBT §1.5 and SPS §1.4.

³ WTO WTR 2012, Section C.2(d), p.116. This reflects data from 1995 – 2011 and for those STCs in the SPS IMS database where there was sufficient information to identify products (approximately 85% for both SPS and TBT STCs).

are in the agricultural sector, and the rest in other sectors. Overall, trade in farm goods emerges as the single most important area where STCs are being raised.

2.2 The Mandate of the Committees

The implementation of the TBT Agreement is supervised by the TBT Committee, which was formally established with the purpose of:

...affording Members the opportunity of consulting on any matters relating to the operation of this Agreement or the furtherance of its objectives, and shall carry out such responsibilities as assigned to it under this Agreement or by the Members.⁴

For the SPS Agreement, the relevant mandate reads:

The Committee shall encourage and facilitate ad hoc consultations or negotiations among Members on specific sanitary or phytosanitary issues.⁵

For SPS, the procedural vehicle necessary to facilitate consultations between WTO Members – STCs – was supplied through the Working Procedures of the SPS Committee which were adopted in March 1995 and provide:

With respect to any matter which has been raised under the Agreement, the Chairperson may, at the request of the Members directly concerned, assist them in dealing with the matter in question. The Chairperson shall normally report to the Committee on the general outcome with respect to the matter in question.⁶

⁴ TBT §13.1.

⁵ SPS §12.2.

⁶ WTO Doc. G/SPS/1 of March 15, 1995, paragraph 5.

In TBT, the discussion of STCs evolved over time and it was only relatively recently (in 2009) that the Committee formalized the procedure for discussion STCs – essentially in an effort to cope with a growing agenda. At that point delegates in the TBT Committee, noting the ‘accelerated growth’ in the number of specific trade concerns raised, as well as the number of Members engaging in the discussion, agreed on a set of guidelines (e.g., sequencing and time limits) to streamline the process so as to make it efficient and to ‘secure a more prompt response to concerns raised’.⁷

In sum, based on rather simple mandates, over time both Committees have developed pragmatic procedures that enable delegations to use the WTO as a platform for the multilateral review of both draft and existing measures of a regulatory nature.⁸

3 Notifications

Both the TBT and SPS agreements contain elaborate transparency requirements. The basic instrument for transparency is a ‘notification’.⁹ Members are required to ‘notify’ other WTO Members (through the WTO Secretariat) of draft regulations (technical regulations or conformity assessment procedures), *before* they enter into force. A ‘notification’ is in practice a one or two page document that reflects forthcoming regulation affecting trade (increasingly they also contain hyperlinks to the actual full draft of the proposed measure). Two important caveats should be made at this point: (i) Members only have an obligation to notify measures that may have a *significant* effect

⁷ WTO Doc. G/TBT/1/Rev.10, page 43.

⁸ Puig and al Haddab (2011).

⁹ There are, of course, other aspects of transparency covered by these two Agreements parallel to notification requirements. For instance, Members have to establish ‘enquiry points’ (TBT §10.1 and SPS Annex B, §3) which serve as national focal points for information exchange on standards and regulatory matters that affect trade. Enquiry points are meant to be one stop shops to facilitate communication both within and among countries on TBT and SPS matters. Traders can ask questions about both existing as well as future measures and obtain information without implicating their governments at all (unlike the paradigm for the overwhelming majority of WTO law). Biukovic (2008), and Bacchetta et al. (2012) discuss in detail the system of WTO notifications. Transparency obligations increasingly become the subject-matter of formal disputes. So far nevertheless, case law has limited itself to claims regarding the consistency of national measures with the general transparency obligation embedded in Art. X GATT, see Ala’I (2008).

on trade, *and* (ii) measures that are *not* based on an international standard.¹⁰ In practice, several Members tend to err on the side of caution, notifying more measures that actually would be strictly necessary to notify.

Notifications should happen at an early stage of the national legislative process, when amendments can still be introduced and comments can be taken into account (by the regulator). Over the years, substantial time has been spent developing and refining recommendations aimed at facilitating the practical implementation of the transparency requirements. Concrete proposals regarding the deadline for comments, the circulation of full draft texts have been made and practice has evolved along these lines.

Figure 1 depicts the evolution of the number of SPS and TBT notifications over the period 1995-2012. Since the entry into force of the agreement in January 1995 until the end of 2012, 15,736 TBT notifications have been made by 116 Members of the WTO. For the SPS Agreement, during the same period, 11,275 measures have been notified by 108 Members.¹¹ The number of notifications from developing country members is also rising steadily. Figure 1 does not purport to address the extent to which WTO Members live up to the notification requirements, since this would require that we know the total number of draft measures that should be notified.¹² We can still conclude that in absolute terms, there is clear trend toward an increasing number of notifications for both SPS and TBT measures.¹³

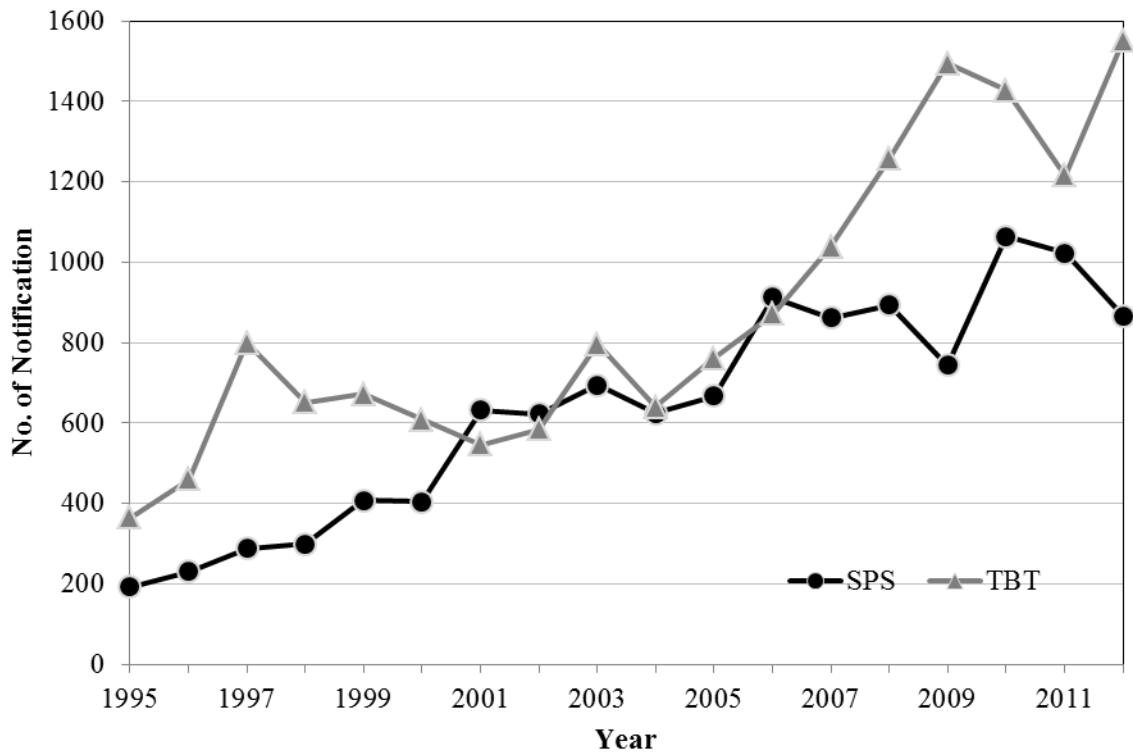
¹⁰ SPS §7 and Annex B, §5 and TBT §2.9 and §5.6. The presumption is that those measures that are based on international standards will not unnecessarily restrict international trade.

¹¹ These figures includes all notifications (both regular and emergency), including revisions – but excluding addenda and corrigenda. For TBT, the figures are drawn from G/TBT/33, paragraph 2.1. For SPS, the figures are drawn from I-TIP (<http://i-tip.wto.org/>).

¹² As Collin-Williams and Wolffe (2010) point out, since notification of TBT or SPS measures is not necessarily self-incriminating, Members should have stronger incentives to notify these than e.g. subsidies or import licensing measures. Downs (2012) argues that transparency may also lead to regulatory chill and under-regulation where doubts are raised on the consistency of notified measure with assumed obligations.

¹³ WTO TBT IMS database (<http://tbtims.wto.org/>).

Figure 1: The number of all new SPS notifications and TBT notifications



4 Specific Trade Concerns (STCs)

We will now examine the frequency and nature of STCs.¹⁴ To this end we will employ a data set that includes all STCs raised in meetings of the SPS and TBT Committees from 1995 to 2012.¹⁵ We begin by discussing who participates in STCs in the Committee and then we will take a closer look at the numbers and the nature of the STCs themselves.

¹⁴ Lang and Scott (2009) discuss STCs from a different perspective, for instance pointing to how this mechanism promotes trans-national governance.

¹⁵ Data is taken from TBT and SPS Information Management Systems (tbtims.wto.org and spsims.wto.org).

4.1 The participants in STCs

The most frequent type of concern is purely bilateral in nature (it arises between two Members): about half of all STCs (both SPS and TBT) involve one Member addressing a measure pursued by one other Member. In 40% of the cases there are between 2 and 5 concerned Members (e.g. WTO Members that have raised a concern against a specific measure adopted by another WTO Member), in 7% there are between 6 and 10 concerned Members, and in 3% more than 10 concerned Members. With respect to frequency, usually, STCs are raised and discussed within a few (successive) meetings of the relevant Committee. There are a few outliers in this regard. The most extreme is the STC concerning the EU REACH Regulation (chemicals). The protection of human health or safety, as well as the protection of the environment, are among the stated objectives being pursued by the European Union (EU) through the REACH regulation. This case has been on the TBT agenda for over 10 years, and more than 30 Members have been involved so far in the on-going discussions. The absence of resolution after 10 years notwithstanding, this STC has not been submitted to formal dispute settlement.¹⁶

Figures 8 and 9 depict the ten most active Members raising STCs in the SPS and TBT Committees. As can be seen, there is a high degree of overlap: the same 8 countries are among the 10 most active in both Committees. The EU and the US dominate, each accounting for twice as many STCs as the third most active country.

Figure 8: Members that most frequently launch SPS STCs

¹⁶ REACH is the European Union Regulation that governs the safe use of chemicals (EC 1907/2006). It entered into force on 1 June 2007 and deals with the Registration, Evaluation, Authorisation and Restriction of Chemical substances (http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm). It was first raised in the TBT Committee in March 2003 and, at was, at the time of writing, to be raised in March 2013.

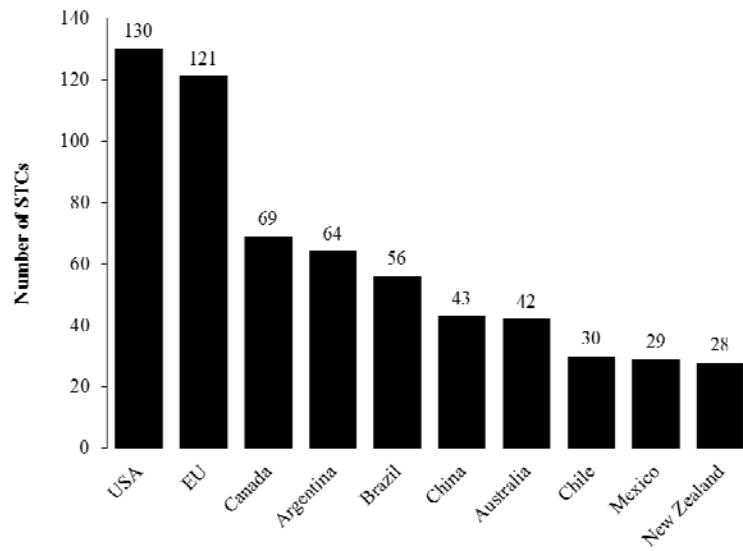
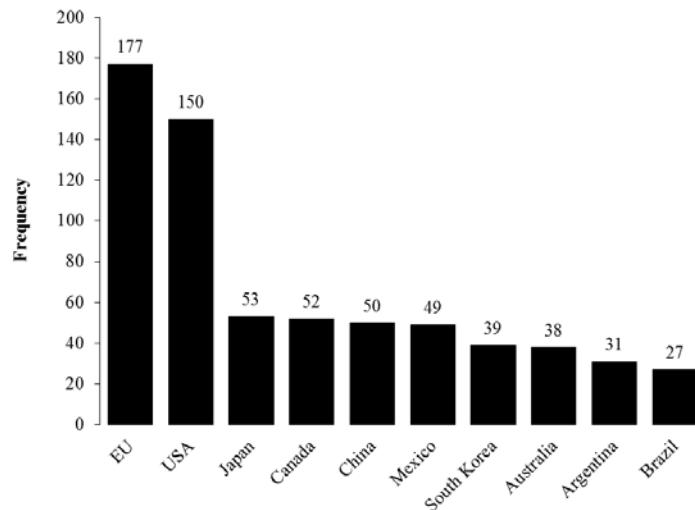


Figure 9: Members that most frequently launch TBT STCs



On the responding side (Figures 10 and 11), the picture is fairly similar, with a total of 13 Members featuring. But a striking feature is the almost complete dominance by the EU, which is the target of more than 40% of the concerns raised in both the SPS and the TBT Committee. The EU has faced more than four times as many STCs in the SPS area, compared to the next most often responding country, Australia, and almost four times as many on the TBT side, where China is the second most active.

Figure 10: Members that most frequently face SPS STCs

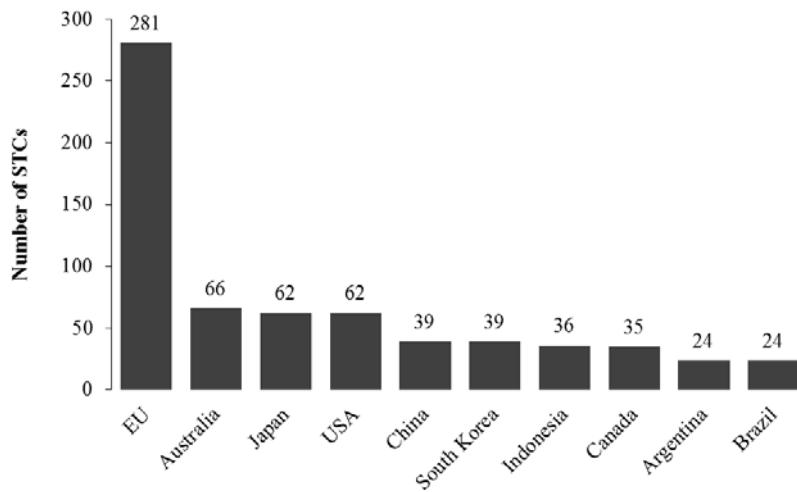
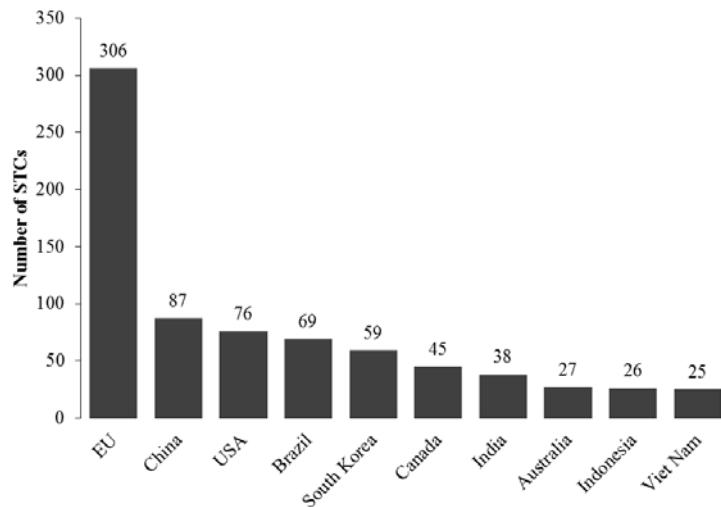


Figure 11: Members that most frequently face TBT STCs



To shed some light on who is concerned by whose measures, we first classify WTO Members into five broad groups:¹⁷

- G2: The EU, and the United States (US)
- IND: Other industrialized countries
- BRIC: Brazil, Russia, India and China

¹⁷ Appendix 1 gives a complete classification of all WTO Members that have participated on either side of an SPS or TBT STC according to these five categories.

DEV:	Developing countries other than LDC
LDC:	Least developed countries

In this classification, the definition of EU follows the actual enlargement. The group IND consists of OECD Members, the non-OECD Members among the 12 countries that most recently became members of the EU, those that are currently at an advanced stage of their accession negotiations, as well as countries that are not OECD Members but have a very high per capita income, such as Singapore. Russia is included in the BRIC group despite not being a WTO Member during most of the period covered by the data set, since it used its Observer status to appear as complainant in the TBT Committee. We use the classification by the United Nations to identify the LDC group. The DEV group consists of all countries which do not fit into either of the above mentioned categories.

Second, in order to quantify the frequencies of different constellations of concerned and responding countries, we need to address the fact that there may be several concerned countries, and these countries may belong to different country groups. We will therefore rely on the notion of a 'bilateral STC'. The basic idea behind this approach is to view STCs between WTO Members at a bilateral level. That is, if two Members are concerned about a measure undertaken by a third Member, we count each one of them having a 'bilateral STC' with the third Member. We do this not only to solve the problem of how to classify STCs where countries stem from different country groups, but also since we believe that the 'packaging' of such bilateral relational problems into one administrative unit, an STC, tends to hide information concerning the extent of conflict between different Members. It should be emphasized that there is no single correct definition; the appropriate definition is determined by the question that the data is to answer. As a consequence of the conversion of STCs into bilateral STCs as the unit of account, the number of observations in the data set is increased from 710 to 1,940.

For many STCs and especially some notorious cases (e.g., the EU REACH mentioned above), when the issue is raised by one Member in the Committee, others 'support' the concern raised. It seems plausible that in some cases, the supporting countries are not as deeply involved in the dispute as the country initiating the STC. But in the data we have

no definition of ‘co-complainant’, or even ‘third party’, à la Arts. 4.11 and 10 DSU respectively, that we would allow us to distinguish between different degrees of involvement whenever STCs are raised. We therefore count all countries that are involved in STCs, as being equally involved in an STC.

Tables 1a and 1b display the breakdown of respectively SPS STCs and TBT STCs on the different possible (concerned Member, responding Member) categories. The pattern is fairly similar across the two policy areas. There are a couple of noteworthy features, however.

Table 1a: Who is concerned with whom in SPS STCs?

		RESPONDENT				Total
		BRIC	DEV	G2	IND	
CONCERNED	BRIC	0.4	0.3	7.53	1.0	9.3
	DEV	2.9	3.3	13.3	4.3	23.8
	G2	11.0	9.4	5.05	8.3	33.7
	IND	6.1	5.8	13.51	6.7	32.1
	LDC	0.3	0.0	0	0.8	1.1
		Total	20.7	18.8	39.38	21.1
						100.0%

Table 1b: Who is concerned with whom in TBT STCs?

		RESPONDENT					Total
		BRIC	DEV	G2	IND	LDC	
CONCERNED	BRIC	0.6	2.3	5.8	3.5	0.1	12.3
	DEV	1.5	4.8	17.5	8.2	0.0	32.0
	G2	4.8	7.6	4.5	8.8	0.0	25.6
	IND	2.7	8.4	7.3	11.0	0.0	29.4
	LDC	0.0	0.1	0.5	0.1	0.0	0.7
		Total	9.5	23.1	35.6	31.6	0.1
							100.0%

First, the share of intra-G2 STCs is very low: less than 5% in both cases. This is in sharp contrast with the number of intra-G2 disputes before the DSU: G2 targets G2 in close to 36% of its total complaints, whereas intra-G2 complaints represent as high as 15% of total complaints raised before the DSU.¹⁸ The numbers quoted here seem to suggest that the intra-G2 disputes do not concern regulatory barriers, the presence of high-profile cases (such as EC-Hormones) notwithstanding. This is confirmed by a detailed look into the profile of G2 disputes before the DSU.¹⁹ Additionally, this number lends support to findings in the literature to the effect that regulatory barriers raised in the G2 most likely affect developing countries.²⁰

A second striking feature is that the most common constellation is that a DEV country raises a concern with a G2 country measure, and this despite the fact that a number of countries that classify themselves as 'developing' in the WTO, such as Mexico, South Korea, and Turkey, have been included in the IND group, and there is a separate BRIC group.

Third, for SPS STCs, the DEV group is significantly more often on the side of the concerned country rather than the responding country, while the role of G2 is the opposite. The picture is somewhat different for TBT however, where this 'overrepresentation' of DEV as concerned Member is slightly smaller. Instead, the IND group appears significantly more frequently as concerned rather than as responding country, and the same holds for the BRIC group.

The picture that emerges is thus that the SPS and TBT Committees offer arenas where developing countries (other than LDCs) are more active than their share of trade would suggest, requesting clarifications concerning measures, and perhaps also resolving problems with, in particular, more affluent countries.

¹⁸Horn et al. (2011).

¹⁹Horn et al. (2011).

²⁰Wilson and Otsuki (2005).

4.2 The number of STCs

Figure 2 displays the evolution of the number of new SPS and TBT STCs raised each year. This does not fully reflect the number of STCs that are discussed every year because Members frequently revert to STCs that have been raised on previous occasions – indeed more time is usually spent raising new aspects or requesting further clarification with respect to such previously raised concerns. The second time an STC is raised, discussions often tend to widen as other Members get involved.

Figure 2: The number of new SPS and TBT STCs

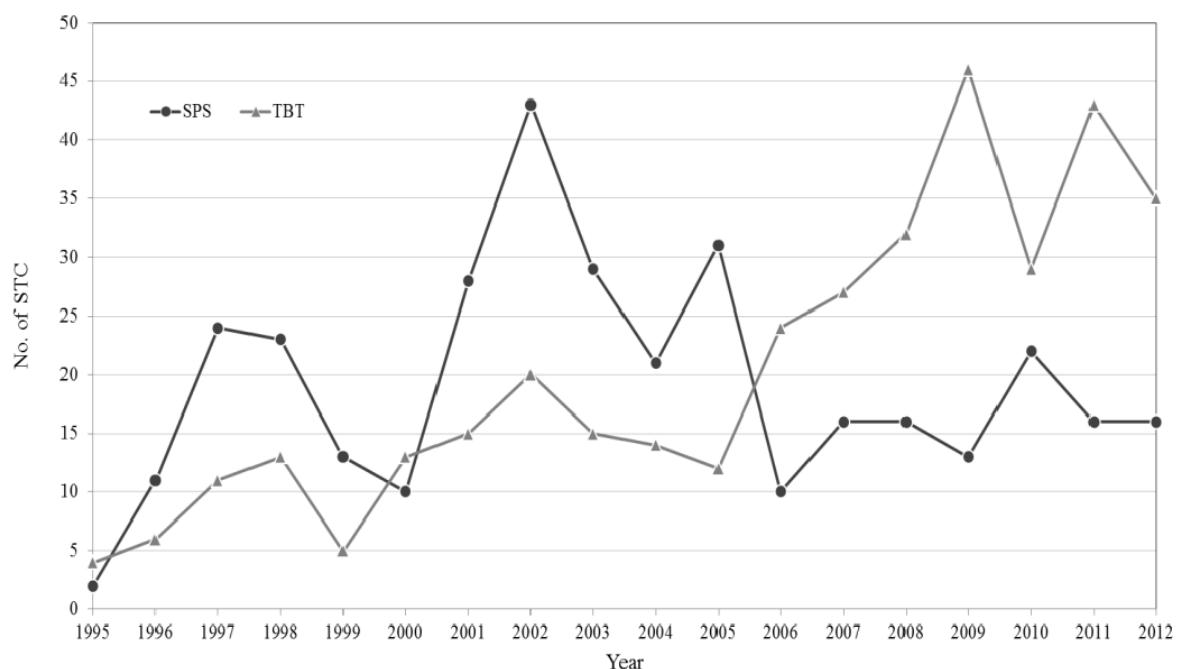


Figure 2 shows that the number of TBT STCs has increased steadily over the whole period; for instance, the average yearly number of TBT STCs during the first nine years of the WTO, 1995-2003, was 11.3, while the following nine years the yearly average was 29.1 STCs.²¹ The picture is similar for SPS STCs during the first period, for which there is

²¹ Approximating the development of the TBT STCs with a linear trend, the yearly increase in the number of TBT STCs is slightly over 2.

an upward trend, albeit not as steady as for TBT STCs. But after the record year 2002, the number of SPS STCs has declined.²²

The diverging use of the STC mechanism in the two Committees is difficult to explain. A comparison with Figure 1 shows that the fall in the number of SPS STCs in the second half of the period cannot be attributed to a falling number of SPS notifications, since they have steadily increased throughout the period (we will return to the relationship between notifications and STCs below). In light of the fact that each of the four years 2001-2005 saw more SPS STCs than any year thereafter, it does not seem to be randomness either.

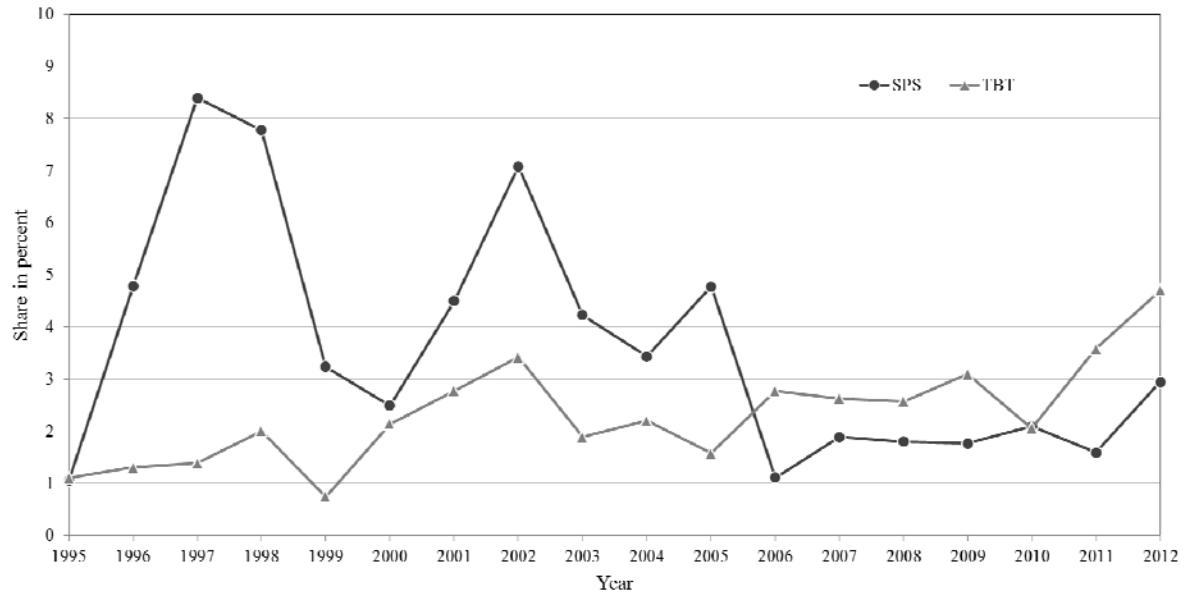
It can also be noted that in the year of the spectacular fall in world trade, 2009, the number of TBT STCs was more than twice the average of the preceding six years (46 compared to an average of approximately 20.7 during 2003-2008). On the other hand, the number of SPS STCs was below the average during this period.

4.2.1 STCs and notifications

Members can initiate STCs concerning both measures that have been notified and those that have not. Indeed, on occasion, the very fact that a measure has *not* been notified is the reason that a Member raises the matter in the Committee. Although the data does not tell us to what extent, it seems plausible that notifications provide important information to other Members about measures that are in the draft stage. There should, thus, be a positive correlation between the number of notifications, and the number of STCs. To shed light on this relationship, Figure 3 combines the data underlying Figures 1 and 2, showing the number of STCs relative to the number of notifications.

²² The correlation coefficient is .88 during the period 1995-2003 and -.63 during 2004-2012.

Figure 3: The number of STCs as per cent of the number of notifications



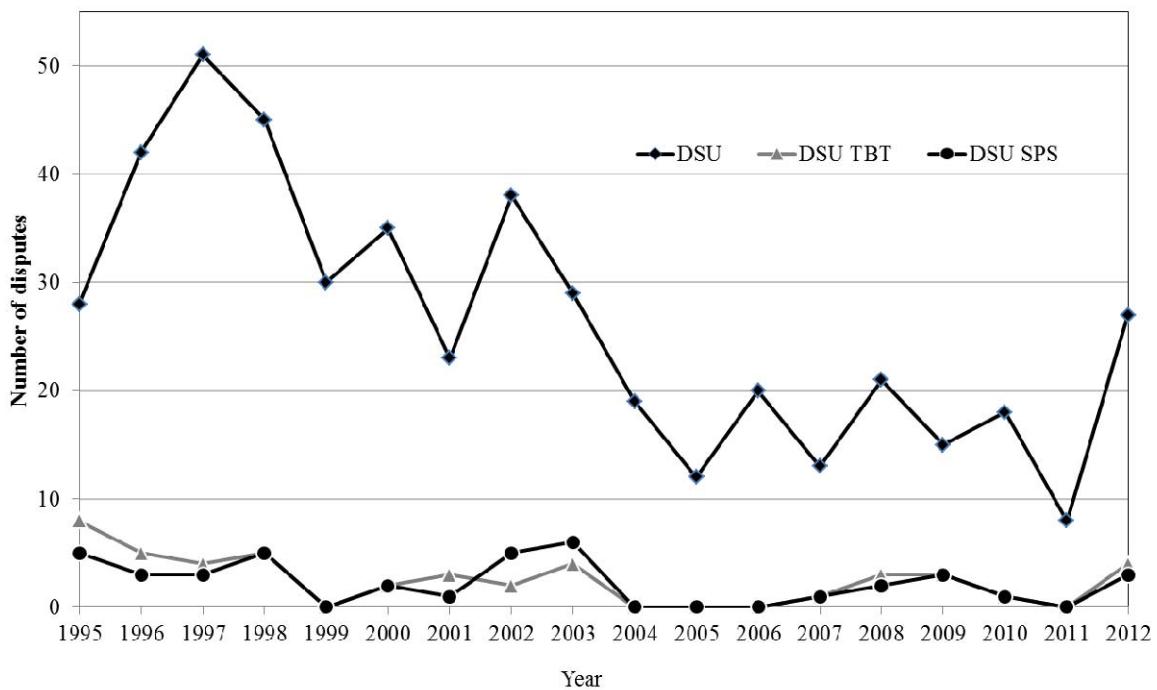
A number of observations can be made on basis of Figure 3. First, the number of STCs is typically much lower than the number of notifications: in the case of the TBT Committee, the ratio between the number of notifications and the number of STCs is on average less than 3%, and it is maximally 5%. For SPS STCs, the ratio is on average below 4%, but with a maximum value above 8%. However, in both cases, for most of the years the fraction on both the SPS and the TBT sides is less than 5%. Hence, the number of STCs is typically a small fraction of the number of notifications. This is not surprising as such, since Members have, with some exclusion, an obligation to notify *all*/new or changed measures and most of the notified measures are unproblematic.

Second, looking at the development over time, the TBT series is fairly stable, reflecting the high degree of correlation (.83) between the number of TBT notifications and the number of TBT STCs. However, on the SPS side, there is more variability. The correlation between the number of SPS notifications and the number of SPS STCs is also low (.16). These observations seem to suggest that in the TBT Committee, notifications serve an important role to provide information that leads up to STCs. But on the SPS side, other sources than notifications may as well drive STCs.

4.2.2 STCs and DSU disputes

Yet another interesting comparison is between the number of STCs and the use of the Dispute Settlement (DS) system. Figure 4 illustrates the total number of disputes that have been initiated in the DS system along with those disputes in which the SPS or the TBT Agreement have been invoked. The figure plots the number of instances where at least one claim has been made under the TBT and/or the SPS Agreement in disputes since 1995. For SPS, the total number of disputes is 40, for TBT it is and 45. It should be noted that in most of these disputes, the claims under the SPS and TBT Agreements are not at the core of the legal issue. The number of 'fully-fledged' SPS and TBT DSU disputes is 11 for SPS, and 5 for TBT (Appendix 2).²³

Figure 4: DSU disputes, total number, SPS and TBT



A key observation here is that that seen over the whole period since the inception of the DSU there is a trend towards fewer SPS and TBT disputes in the DS system. This mirrors the trend toward fewer requests for consultations in the Dispute Settlement system generally. These developments stand in sharp contrast to the increase in the number of

²³ By 'fully-fledged' we mean disputes where Panel and/or Appellate Body Reports have been issued and where the findings are concentrated on either the SPS or TBT Agreements. These disputes are listed in Appendix 2.

TBT STCs. But it is harder to infer any pattern from a comparison of SPS STCs and SPS disputes in the DS system.

4.3 The role of protection of human health or safety and the protection of the environment in STCs

Most of the issues that are discussed in the Committees are technical in nature, and often concern detailed provisions of proposed or implemented regulations. For instance, on the TBT side they may relate to the specifics of a definition (e.g., on the alcohol content of additives to alcoholic products), or to a particular tolerance level for a chemical or toxic substance (e.g., lead in paint used on toys), or to the effects of a particular additive in tobacco – to give a few examples. Equally, for SPS, the focus may be on maximum pesticide limits (on agricultural crops) or the risk of transmitting plant or animal carried diseases through trade in animals, plants or other living materials. Hence, the term ‘specific’ is not taken out of the blue; it indicates that the concern in practice often has a precise as opposed to abstract content.

Hence, the specific and often very complex nature of measures raised in the Committees make them hard to categorize. One way to do this is to use their stated regulatory objectives, which most often has been explicitly mentioned. For measures that are discussed in Committee, the stated objective is most often apparent from the discussion. In addition, for those measures that are notified (as mentioned above, not all measures that are subject to discussion have been notified), the objective is explicitly stated in the notification itself.

In what follows we will highlight the role of two of the most prominent objectives—protection of human health or safety, and the protection of the environment. These objectives are listed as such in the TBT Agreement, and we therefore have information from the TBT STCs whether the STCs address measures at least allegedly pursue these objectives.²⁴

²⁴ It is notable that in the year 2012 alone, 1,023 notifications under the TBT Agreement mentioned the objective of the ‘protection of human health or safety’ (66% of all notifications); for ‘protection of the environment’ the corresponding figure is 253 (16% of all notifications). WTO Doc. G/TBT/33, page 4.

But while the protection of human health is also explicit in the SPS Agreement (food safety or zoonosis), classifying SPS measures according to their relevance for environmental protection is not as straight forward. This is mainly because the SPS Agreement was crafted with a specific focus on a set of circumscribed risks for human, animal and plant life or health. So while the agreement does not explicitly refer to the protection of the environment, many of the measures coming under its purview are effectively relevant to the protection of environment either predominantly so, or as well. We will count the following types of measures to be relevant to the protection of environment: (a) measures aiming to protect plant life or health within the territory of the Member from risks arising from the entry, establishment or spread of pests, diseases, disease-carrying organisms or disease-causing organisms; and (b) measures taken to prevent or limit other damage within the territory of the Member from the entry, establishment or spread of pests.²⁵ We believe that with this approach, although we are most likely under-estimating the total number of measures that are relevant to the protection of the environment, had we also included measures relevant to food safety and pest and disease risk to animal health, we might have been casting the net too wide.

Applying this approach to the data on STCs arising in both the TBT and SPS Committees we find that measures that actually (or allegedly) are pursued with the objective of protecting human health or safety, or the protection of the environment, very frequently

²⁵ With respect to measures taken for the protection of *plant health*, the footnote to the provision entitled 'Definitions' in Annex A of the SPS Agreement states that 'plant' includes forests and wild flora. Thus, this includes measures taken to protect forests from the introduction, entry or establishment of a pest associated with the import of a particular good. Second, measures taken to prevent or *limit damage arising from the entry, establishment or spread of pests* ('territorial risk') are also relevant to the protection of the environment. One example are efforts to prevent the spread of 'invasive alien species', that is, species whose introduction and/or spread outside their natural past or present distribution would threaten biological diversity. Indeed, according to the Convention on Biological Diversity, alien species that become invasive are considered to be the main direct driver of biodiversity loss across the globe. Arguably, there is some overlap – or at least a grey line – between the components of the SPS definition set out in Box 1 (a) and (d). While it is possible to consider biodiversity concerns related to GM plants or cross-breeds becoming 'pests' (by crowding out endemic species) under (d) ('territorial risk') – it is also possible to consider these under (a) – plant/animal health. This is so because of the direct danger they pose to plant or animal health or life (rather than 'other damage' to the territory of a Member). In either case, the environmental relevance of the measure is clear.

raise concerns in both Committees. Indeed, as illustrated in Table 2, taken together, for as many as 66% of all STCs, the stated objectives of protecting human health or safety, or the protection of the environment (or both) are at the root of the concern being addressed.

Table 2: The share of STCs where measures for the Protection of the Environment and/or the Protection of Human Health or Safety are addressed (in percent)

Objective	SPS	TBT	Both
Env but not health	25	13	19
Health but not environment	48	33	40
Env and health	3	11	7
Neither	24	43	34
Total	100	100	100

In sum, measures that actually (or allegedly) pursue the protection of human health or safety, or the protection of the environment, very frequently arise in the SPS and TBT Committees. These figures contrast sharply with the corresponding figures in the DS system, where a significantly smaller fraction of disputes concern measures falling under these two categories.²⁶

4.4 ‘Trivial’ and ‘serious’ STCs

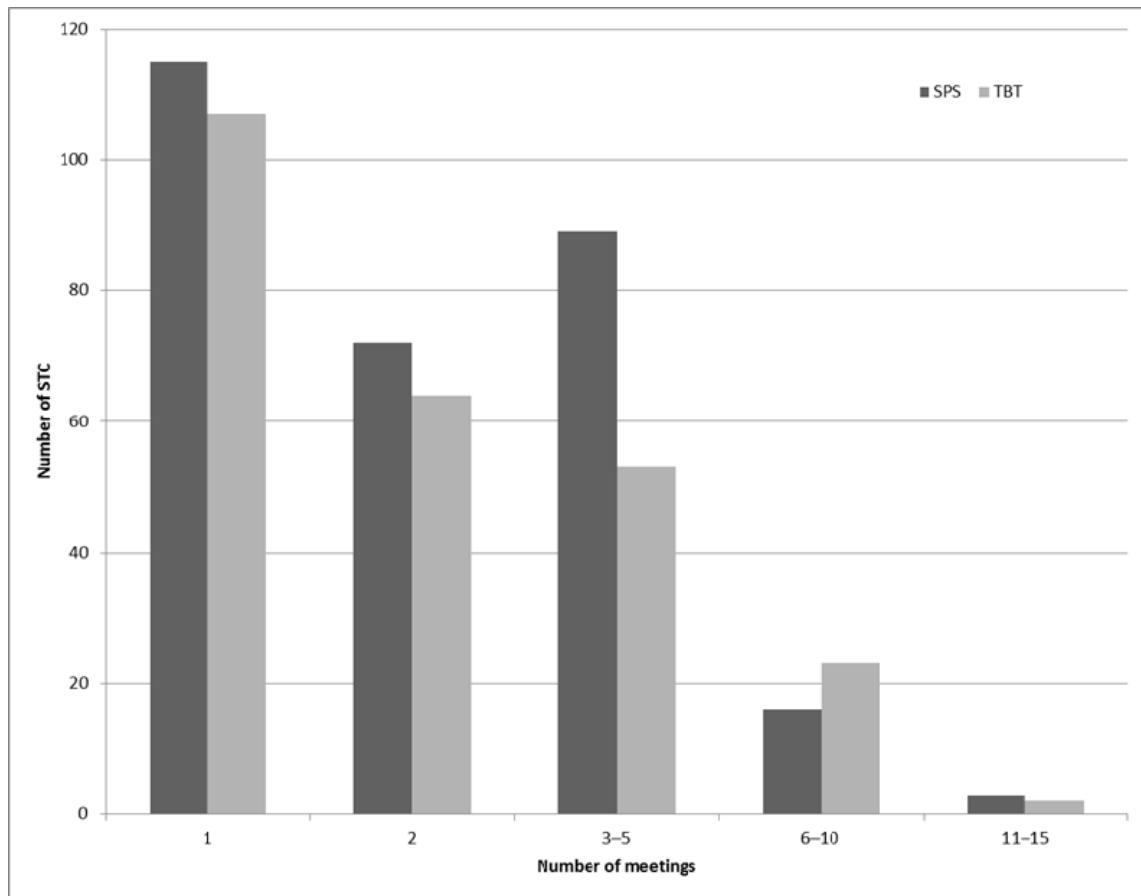
The impact of the STC mechanism clearly depends the nature of the issues that are addressed, whether they concern matters that are more ‘trivial’ in nature (e.g., requests for clarification), or more serious trade conflicts. One likely indication of the degree of ‘seriousness’ of the subject matters is the number of Committee meetings required to get an STC off the agenda. If a mere clarification is requested, or if there is a misunderstanding at the root of the concern, this is likely to have been solved the first time the measure was raised, or at least the second time. Indeed, one reason for

²⁶ See Horn, Johannesson and Mavroidis (2011).

categorizing also those STCs raised in two meetings as not serious is that a matter raised for the first time may only be responded to – and clarified – at the second consecutive meeting, simply because the responding Member was not in a position to respond substantively the first time around. On the other hand, STCs that require three or more meetings seem likely to confer a degree of importance to the concern being raised, indicating that the STC addresses ‘serious’ issues, issues beyond pure clarifications.

In order to provide a more detailed picture of the number of meetings during which STCs stay on the agenda of the Committee, we need to define how long time an STC should be absent from the agenda in order for it to be assumed to have permanently disappeared. This is of course an arbitrary decision, but we will stipulate that an STC should not have been raised for discussion during the last two years to qualify (that is, during the six meetings 2011 and 2012). Applying this criterion, Figure 5 depicts the number of STCs that stayed on the agenda one meeting only, during two meetings, etc. As can be seen, the majority of both SPS and TBT STCs only require one or two meetings; 63% in case of the SPS STCs and 69% for TBT STCs. But, more importantly, there are still in absolute numbers many STCs that address serious concerns, and that have disappeared from the agenda: 108 of the 295 SPS STCs, 78 out of 249 TBT STCS. A key question we will revert to in Section 5 is whether we can consider these resolved or not.

**Figure 5: The frequency of the number of Committee meetings
for STCs with no meeting during 2011 and 2012**



4.5 Determinants of the number of meetings in STCs

What, then, explains the number of meetings that are required? At least two factors are likely to be important: the number of countries involved, and the technical and political complexity of the subject matter. There is readily available information concerning both the number of concerned Members and the number of responding Members. Much more difficult is of course to assess the complexity aspect. But it seems reasonable to hypothesize that one factor that add such complexity is that the challenged measure purports to be for the protection of human health or safety, or the protection of the environment, are of a complex nature.

In order to determine the exact impact of these factors, we use (robust) ordinary least squares regressions to estimate, for the SPS and TBT Committees separately, how the

number of Committee meetings is explained by the number of concerned and responding Members, and by binary variables indicating whether the protection of human health or safety, or the protection of the environment, are the objectives of the contested measures. In each case we restrict the data to STCs for which the last meeting was 2010 or earlier, in order to allow the STCs to have dormant for at least 6 Committee meetings. We also focus on 'serious' STCs (those with three or more meetings). The outcome is reported in Appendix 3.

For both the SPS and the TBT STCs, the number of concerned Members is significant (at the 5% level for SPS at 1% for TBT), and the number of responding Members is highly significant for SPS STCs, but non-significant on the TBT side. The estimates suggest that adding another concerned Member adds a third of a meeting to the total number of SPS meetings and slightly more to TBT meetings. Adding another responding Member has an even stronger effect, and increases the total number of SPS meetings with a half meeting. We can hence conclude that the amount of resources that each participating Member spends on an STC seems positively correlated with the number of participants on either side.

Turning to the impact of the 'complexity' measures, health is weakly (10% level) significant in the case of SPS STCs. However, the estimates suggest that when a health measure is on the agenda, the number of meetings is almost .7 fewer, contrary to what we hypothesized. On the TBT side, health is again significant at the 10% level, but now adds one meeting to the total number of meetings for the TBT STCs. Finally, the environment variable is significant at the 5% level for TBT STCs, and bringing environmental measures on the agenda is estimated to add over one meeting to the total number of meetings for a TBT STCs. We can thus conclude that there is mixed support for the notion that SPS or TBT STCs that involve health or environment objectives contribute to longer STCs through their inherent technical or political complexity.²⁷

²⁷ Both variables are significant however in the TBT case, if the data also includes STCs with fewer than three meetings. In this case, they variables are positive, and the estimates suggest that an STC that addresses environmental protection or health requires slightly less than one meeting more.

5 The resolution of STCs

As discussed above, STCs are not formal disputes; there are no judges, and the SPS and TBT Committees have not mandate and are not empowered to 'settle' the matters that are raised. The work on STCs in the Committees should hence not be equated with a formal settlement procedure. But it would be a rather stringent criterion to argue that that a conflict necessarily has to go through the regular dispute settlement process in order to be classified as 'settled'. The logical conclusion of the argument would be that only a limited number of fully-fledged TBT and SPS disputes would currently count as settled (Appendix 2). This does not appear to capture the full extent of such conflict resolution, however.

In the SPS and TBT Committees, a Member, or a group of Members, engage in a dialogue with other Member(s) concerning a specific policy measure; there is an exchange of information and views, and concerned Member(s) can rest the case if they so desire, for instance if they are sufficiently convinced concerning the legality of the measure; or, they can request a change in the contested measure – or in the light of explanations and clarification the challenging Members may decide not to pursue the matter further. As a result of the information obtained, or of the change in the policy, the concerned Member may decide on its own that the matter has been resolved, even though similar decisions are void of any formalism. Thus, some form of settlement takes place also in the case of STCs.

In order to determine the extent to which STCs can be said to be settled, we need to proceed somewhat differently with regard to SPS and TBT STCs.

5.1 SPS

On the SPS side, settlements are officially reported. STCs are classified as either as 'resolved', or 'partially resolved', or 'not reported'. Members are encouraged to inform the Committee when they have bilaterally resolved an STC that has previously been brought to the Committee's attention. STCs are considered 'resolved' where the two

parties involved report to the Committee that the issue has been resolved.²⁸ When several Members have raised an STC, it is counted as 'partially resolved' if not all involved have stated that it has been resolved.

How did this practice develop? Three reviews of the operation and implementation of the SPS Agreement have taken place so far: in 1999, 2005, and 2010.²⁹ In the context of a review, the operation of the SPS Agreement as a whole is evaluated (STCs are but one of the items that are being evaluated). In various parts of these reports we read phrases to the effect that STCs have been 'resolved'. The 1999 review reads in part:

The Committee welcomed the fact that a substantial number of SPS-related trade matters has been resolved following their discussion at formal meetings of the Committee or bilaterally.³⁰

... the Committee noted that the use of §12.2 could be an effective means of satisfactorily resolving problems.³¹

In the 2005 review, the SPS Committee notes:

The number of specific trade concerns raised in the Committee during the years 1995-2004 gives, on the one hand, an indication of the number of problems (204) faced by Members, and on the other hand, evidence of the increasing use of the Committee as a forum to try to resolve these problems (56 problems were reported resolved during the same period).³²

²⁸ Formally, an STC is also considered resolved when the matter has gone to a DSU Panel. However, in practice there is not a single case where this has occurred. It can also be noted that legally it is yet not clear whether 'resolution' before the Committee amounts to formal resolution to the effect that, for example, none of the parties can raise this matter again before a WTO Panel. But practice so far thus suggests that WTO Members treat 'resolved' issues before the SPS Committee as definitively resolved.

²⁹WTO Docs. G/SPS/12 of March 11, 1999; G/SPS/36 of July 11, 2005; G/SPS/53 of May 3, 2010.

³⁰WTO Doc. G/SPS/12 at §4.

³¹WTO Doc. G/SPS/12 at §24.

³²WTO Doc. G/SPS/36 at §10; see also §84 of the same document.

In similar vein, we read in the report of the 2010 review under the heading, 'Recommendations':

Members are encouraged to make use of this opportunity to identify specific trade problems and to seek to find expeditious and mutually satisfactory resolutions of these problems.³³

We thus have three documents from the SPS Committee, spanning over 12 years, which reflect almost identical expressions when referring to 'settlement' of disputes at the SPS Committee-level: this should be strong evidence of state practice to understand that they can 'resolve' their concerns in the context of the SPS Committee when raising them as STCs. Based on these statements, it seems reasonable to conclude that Members in the SPS Committee indeed resolve trade disputes, the lack of legal formalism to this effect notwithstanding.

Table 2a: Resolution of SPS STCs according to SPS Committee records

Status	No of STCs	Percent
'Resolved'	96	28
'Partially resolved'	18	5
'Not reported'	230	28
Total	344	100

Turning to the numbers, Table 2a shows the frequency and fraction of the three status categories. As shown, a significant proportion, or 28%, of the 344 SPS STCs are reported as resolved, another 5% are partially resolved, while there is no report for 67% of the STCs. As we will argue next however, we believe that we can gain further insight into the

³³WTO Doc. G/SPS/52 at §94.

extent to which trade disputes are resolved by adjusting the definition of when an STC should be considered to be resolved.

Table 2a includes all STCs. But since we are interested in STCs that reflect some form of conflict between Members, we use the criterion for a STC to be assumed to be serious, discussed in Section 4.4, and focus on STCs that have been raised in at least three Committee meetings. As can be seen from Table 2b, the share of STCs that are reported as resolved is substantially higher for serious STCs than for non-serious STCs.

Table 2b: Resolution of SPS STCs according to SPS Committee records for STCs lasting three or more Committee meetings (i.e., 'serious' STCs)

Status	No of STCs	Percent of all 123
'Resolved'	46	37.4
'Partially resolved'	14	11.4
'Not reported'	63	51.2
Total no of 'serious'	123	100

A second adjustment, sticking with the 'serious' concerns (123), would be to consider STCs as resolved even though they have been reported as only partially resolved, or not reported at all, if they have been inactive for a certain length time. The reason for such an adjustment is that it is commonplace in the WTO that the resolution of trade conflicts is not reported; for instance, a significant number of DSU disputes die out before panels are established, and without any notification of a Mutually Agreed Solution. One indication why such an adjustment may be reasonable is the fact that for the 221 SPS STCs which have been discussed in one or two meetings, 76% are listed as 'Not

reported', whereas SPS STCs that have lasted for three or more meetings (the 'serious concerns') the numbers are significantly lower, or 51% out of the 63 STCs.³⁴

In order to determine the fraction of the serious SPS STCs that plausibly are resolved despite having been reported as either 'partially resolved' or 'Not reported' we employ the criterion discussed in Section 4.4, which assumes that an STC has been resolved if it has not have been raised for discussion during 2011 or 2012. With this adjustment, the fraction of resolved STCs will clearly increase further. Table 2c depicts the implications of applying this criterion to the 123 'serious' SPS STCs (i.e., the STCs that have been addressed in at least three meetings). In addition to the 46 'serious' SPS STCs that are resolved according to the Committee records, 14 'Partially resolved' and 49 'Not reported' STCs have not been raised during 2011 and 2012, and are therefore assumed to also be resolved. Hence, 88% of the 123 'serious' SPS STCs would be considered as resolved according to this metric.³⁵

Table 2c: Assessed resolution of SPS STCs lasting three or more Committee meetings (i.e., 'serious' STCs)

Status	No of STCs	Percent of all 123 serious STCs
'Resolved' according to Committee records (official)	46	42.6
'Partially resolved' and not raised in 2011-2012	14	12.0
'Not reported' and not raised in 2011-2012	49	45.4
Total	108	87.8

³⁴ Indeed, looking at STCs with one meeting only, 116 out of 137, or 85%, are listed as "Not reported". One plausible explanation for the considerably lower frequency for reported resolutions for STCs that have been raised only in one or two meetings may be that the subject matters of these STCS are not viewed as important enough to merit further engagement.

³⁵ The fact that the 123 STCs include 3 that were initiated during 2011 and 2012 implies that the rate of settlement is slightly underestimated.

5.2 TBT

On the TBT side it is more difficult to assess whether STCs are settled, since there is no official record for settlement.³⁶ Currently, the official record indicates 'Not Reported' as the current status for all TBT STCs. But there is no a priori reason why Members could not reach a similar degree of convergence regarding measures discussed before the TBT Committee. In fact, the Committee itself has underlined how the discussions on STCs enhance the transparency of TBT measures, and that this multilateral review of measures has

...effectively facilitated the resolution of – or diffused at an early stage – issues arising between Members relating to specific trade concerns.³⁷

There are therefore very good reasons to believe that also TBT STCs often get settled.

In order to assess the proportion of TBT STCs that can reasonably be assumed to be resolved, we impose the same two requirements that were used above for SPS STCs. Hence, to confer 'seriousness' we count TBT STCs that have been raised in three or more meetings; 148 of the 366 TBT STCs are 'serious' according to this classification. Among these, 78 STCs have not been reverted to in the last six meetings (two years). Hence, 53% of all serious TBT STCs would, according to this count, be assumed to have been resolved.

Needless to say, the method we employ for determining whether the STCs are settled is crude, and the numbers are therefore not to be taken literally. We nevertheless believe that the basic message they convey – that a significant number of serious matters are discussed and settled in the SPS and TBT Committees – is correct.

³⁶The difference between the two agreements in this respect is remarkable, but we have still not found any persuasive explanation of the discrepancy.

³⁷ WTO Doc. G/TBT/26, paragraph 65.

6 Discussion

The SPS and TBT Committees have since 1995 addressed several hundreds of STCs each. In the above, we have examined a large number of facets of these STCs, which has led to a number of findings and conclusions.

First, at least a third of the STCs can be presumed to have addressed trade conflicts between Members, that is, matters that go beyond mere clarification and information, since they been raised at several meetings (we have used three meetings as a proxy for ‘seriousness’).

Second, it appears as if the transparency mechanisms of the TBT Committee – its notifications mechanism – has been conducive to enabling Members to identify sources of potential concern: the number of TBT STCs raised in the Committee has, over time, been strongly correlated with the number TBT notifications, suggesting that the latter have served as sources of information behind the STCs. Somewhat surprisingly, a similar correlation cannot be found on the SPS side.

Third, very few STCs go to formal dispute settlement. While claims under the SPS and TBT Agreements are referred to 40 and 45 DSU disputes, respectively, these same agreements have, overall, been at the core of only a limited number of disputes. Furthermore, the number of DSU disputes in general, as well as SPS and TBT disputes, have tended to decline over time – although 2012 did see an upward spike.

Finally, for SPS, 37% of the STCs that we have classified as ‘serious’ have officially been reported as resolved. However, under the plausible assumption that disputes are resolved if the last meeting in which they were raised was 2010 or earlier, the vast majority of ‘serious’ SPS STCs would be classified as resolved. And while there is no such official record for the TBT side, corresponding calculations suggest that more than half of ‘serious’ TBT STCs have been resolved. These calculations obviously do not purport to show the exact extent of trade conflict resolution in the two Committees, but we nevertheless believe that the basic message they convey – that a significant number of serious matters are discussed and settled in the SPS and TBT Committees – is correct.

Unlike many other WTO Committees, work in the SPS and TBT Committees is remarkably technical in nature, and the delegations frequently rely on experts from capitals. Discussions do not normally gravitate towards politics, as in other areas of the WTO negotiations, nor do they become exceeding legalistic, as in formal disputes settlement. Indeed, only rarely do Ambassadors intervene and the Committees are normally chaired by second-level Geneva-based diplomats. As a result, and because of the said technical nature of the issues on the table, the trade concerns are often discussed more on their intellectual merits than as *quid pro quo* in a wider trade game.³⁸ Another plausible reason for the success rate is the fact that raising an STC in the SPS or TBT Committee is not akin to litigating before a Panel: opinions expressed will not be held binding on those expressing them, and hence those participating can adopt a more liberal language when illuminating aspects of the contested measures.

To conclude, the TBT and SPS Committees do not resolve trade concerns in a formal, legal sense (this is, in any case, not their mandate). But the analysis above suggests that the Committees nevertheless provide what appears to be a well-functioning mechanism to address a broad range of non-tariff related trade concerns coming under their purview, and that both Committees contribute in a quantitatively important fashion to diffuse trade tensions in their respective areas. This important, but seemingly less well known, form of conflict resolution is conducted in the shadow of formal adjudication in the Dispute Settlement system.

³⁸Wolfe (2013) concludes along the same lines.

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Appendix 1: Classification of participants in STCs in country groups

G2: EU, USA

IND: Australia, Bulgaria, Canada, Croatia, Czech Republic, Estonia, Hong Kong, Hungary, Iceland, Israel, Japan, Latvia, Mexico, New Zealand, Norway, Poland, Romania, Singapore, Slovak Republic, Slovenia, South Korea, Switzerland, Turkey

BRIC: Brazil, China, India, Russian Federation

DEV: Albania, Arab Emirates, Argentina, Armenia, Bahrain, Barbados, Belize, Bolivia, Botswana, Cameroon, Cape Verde, Chile, Chinese Taipei, Colombia, Costa Rica, Cuba, Côte d'Ivoire, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Fiji, Gabon, Guatemala, Honduras, Indonesia, Jamaica, Jordan, Kenya, Kuwait, Macedonia, Malaysia, Mauritius, Moldova, Morocco, Nicaragua, Nigeria, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Qatar, Saint Vincent and the Grenadines, Saudi Arabia,

South Africa, Sri Lanka, Suriname, Thailand, Trinidad and Tobago, Tunisia, Ukraine, Uruguay, Venezuela, Viet Nam, Zimbabwe

LDC: Benin, Burundi, Gambia, Malawi, Mozambique, Senegal, Tanzania, Uganda, Zambia

Appendix 2: 'Fully-fledged' TBT and SPS Disputes

Since the entry into force of both the SPS and TBT Agreements up until the end of 2012, 45 cases cite the TBT Agreement in their request for consultations and 40 cases cite the SPS Agreement in their request for consultation.³⁹ However, it is not possible to tell from these numbers how central the claims under TBT and/or SPS were to each of these disputes. Indeed, in some cases, these claims may not have been pursued at all by Panels or Appellate Body; in other cases may have been tangential to the core issue. In other instances, a Panel may not have been established, or the matter may have been settled or terminated without any information provided – and the relevance and/or importance of these two Agreements is therefore not possible to establish. Thus the following table lists what we deem to be a narrower sub-set of disputes that we label: 'fully-fledged' TBT and SPS disputes. In this count we include: (i) those disputes where Panel and/or Appellate Body Reports have been issued⁴⁰; and (ii) where the findings are concentrated on either SPS or TBT. We thus count 5 TBT and 11 SPS 'fully-fledged' disputes.

#	Title and complainant		Complainant and date of Consultation Request (reverse chronological order)	Dispute
1	TBT	US – Clove Cigarettes (Indonesia) United States—Measures Affecting the Production and Sale of Clove Cigarettes	7 April 2010	DS406
2	TBT	US – COOL (Mexico) United States—Certain Country of Origin Labelling (Cool) Requirements	17 December 2008	DS386
3	TBT	US – COOL (Canada) United States—Certain Country of Origin Labelling (Cool) Requirements	1 December 2008	DS384
4	TBT	US — Tuna II (Mexico) United States—Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products	24 October 2008	DS381
5	TBT	EC – Sardines (Peru) European Communities — Trade Description of Sardines	20 March 2001	DS231
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1	SPS	US – Poultry (China) United States — Certain Measures Affecting Imports of Poultry from China	17 April 2009	DS392
2	SPS	Australia – Apples (New Zealand)	31 August 2007	DS367

³⁹ A full listing of these cases can be found on the WTO website under "Disputes by Agreement".

⁴⁰ Disputes currently 'in the pipeline' (where no Panel and/or AB report has been adopted) that may become 'fully-fledged' TBT or SPS disputes are therefore not counted here.

		Australia — Measures Affecting the Importation of Apples from New Zealand (Complainant: New Zealand)		
3	SPS	EC – Approval and Marketing of Biotech Products (Argentina) European Communities — Measures Affecting the Approval and Marketing of Biotech Products	14 May 2003	DS293
4	SPS	EC — Approval and Marketing of Biotech Products (Canada) European Communities — Measures Affecting the Approval and Marketing of Biotech Products	13 May 2003	DS292
5	SPS	EC — Approval and Marketing of Biotech Products (United States) European Communities — Measures Affecting the Approval and Marketing of Biotech Products	13 May 2003	DS291
6	SPS	Japan – Apples (United States) Japan — Measures Affecting the Importation of Apples	1 March 2002	DS245
7	SPS	Japan – Agricultural Products II (United States) Japan — Measures Affecting Agricultural Products	7 April 1997	DS76
8	SPS	EC – Hormones (Canada) European Communities — Measures Concerning Meat and Meat Products (Hormones)	28 July 1996	DS48
9	SPS	EC – Hormones (United States) European Communities — Measures Concerning Meat and Meat Products (Hormones)	26 January 1996	DS26
10	SPS	Australia - Salmonoids (United States) Australia — Measures Affecting the Importation of Salmonids	20 November 1995	DS21
11	SPS	Australia – Salmon (Canada) Australia — Measures Affecting Importation of Salmon	5 October 1995	DS18

Appendix 3: The regression reported in Section 5

OLS regressions are run for the SPS and TBT Committees separately, with the number of meetings (# Meetings) as dependent variable, and with the number of concerned Members (# Concerned), the number of responding Members (# Respond), dummy variables for protection of human health or safety (Health) and protection of the environment (Env), as exogenous variables. The data is restricted to the period 1995-2010, and to STCs with 3 or more meetings. The results are given in the table below, where the first column pertains to SPS STCs and the second to TBT STCs.

VARIABLES	SPS # Meetings	TBT # Meetings
# Concerned	0.300** (0.120)	0.405*** (0.130)
# Respond	0.477*** (0.137)	-0.0888 (0.481)
Env	-0.397 (0.408)	1.117** (0.524)
Health	-0.685* (0.354)	0.994* (0.516)
Constant	3.450*** (0.435)	2.919*** (0.524)
Observations	108	78
R-squared	0.205	0.221

Robust standard errors in parentheses

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