Settling disputes at the World Trade Organization
Settling disputes at the World Trade Organization
Abstract


This cumulative dissertation consists of five self-contained essays, all of which are closely focused around issues that concern the WTO dispute settlement mechanism (DSM). In Essay 1, we describe salient features of the DSM using a unique data set. We observe a spike in new disputes in 2012, which in turn led to an increasing number of panels and appeals. This put the WTO under a heavy workload and delays soon became an issue. In Essay 2, we show that the DSM often appoint institutional insiders to serve as judges. Although the DSM was reformed under the WTO, the judges are similar to those found in the GATT. Furthermore, there is an incentive structure in place that encourage the WTO Secretariat to assume a larger role in writing panel reports and for panelists to let them. Essay 3 examines the role of Special and Differential Treatment (SDT) provision Art. 8.10 of the Dispute Settlement Understanding (DSU) in helping developing countries win disputes against richer countries. We observe that developing countries lose more claims when this provision is applied. I formulate a model and show that this observation can be consistent with the presumed benefit of Art. 8.10. Essay 4 addresses the problem of delays by asking ourselves whether we can lessen the problem with a permanent panel. I study features such as the panelists’ experience and prior working relationships in explaining the time it takes to issue panel reports and efficiency in examining claims. We find that prior collaboration can decrease duration. Lastly, in Essay 5, we assess the impact on trade for members that are not involved in disputes. There is evidence of positive trade effects after a dispute for non-complainants, but the effects are limited to disputes that did not escalate to adjudication. We found no external dispute effects for adjudicated disputes.

Keywords: World Trade Organization, trade policy, trade disputes, dispute settlement, causality, panels, developing countries, panels, international trade

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“…nothing clears up a case so much as stating it to another person.”

Sherlock Holmes, Silver Blaze

There is nothing truer in research than the above observation. Forming a sentence is a solitary task, but forming a research question takes a village. And my village is populated with the most wonderful people.

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Tack för allt ditt stöd och tålamod pappa.

Stockholm, February 2018
Louise Johannesson
List of Essays


ESSAY V  Johannesson, Louise. ‘Are WTO disputes public goods?—Dispute effects on the membership’. *Manuscript.*
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<th>Full Form</th>
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<tr>
<td>ACWL</td>
<td>Advisory Centre on WTO Law</td>
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<td>SPS</td>
<td>Agreement on Sanitary and Phytosanitary Measures</td>
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<td>TBT</td>
<td>Agreement on Technical Barriers to Trade</td>
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<td>TRIPS</td>
<td>Agreement on Trade-Related Aspects of Intellectual Property Rights</td>
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<td>AD</td>
<td>Anti-Dumping</td>
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<td>AB</td>
<td>Appellate Body</td>
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<td>Art.</td>
<td>Article</td>
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<td>Textiles and Clothing</td>
<td>ATP</td>
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<td>ATT</td>
<td>Average Treatment of the Treated</td>
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<tr>
<td>BIC</td>
<td>Brazil, India, China</td>
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<td>BRIC</td>
<td>Brazil, Russia, India, China</td>
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<td>BRICS</td>
<td>Brazil, Russia, India, China, South Africa</td>
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<tr>
<td>Comtrade</td>
<td>Commodity Trade Statistics Database</td>
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<tr>
<td>CTG</td>
<td>Council for Trade in Goods</td>
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<td>CTS</td>
<td>Council for Trade in Services</td>
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<td>CV</td>
<td>Customs Valuation</td>
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<td>DEV</td>
<td>Developing countries</td>
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<td>DD</td>
<td>Difference-in-Differences</td>
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<td>DG</td>
<td>Director-General</td>
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<td>DSB</td>
<td>Dispute Settlement Body</td>
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<td>DSM</td>
<td>Dispute Settlement Mechanism</td>
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<td>DSU</td>
<td>Dispute Settlement Understanding</td>
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<td>G2</td>
<td>EU and US</td>
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<td>EC</td>
<td>European Communities</td>
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<td>EU</td>
<td>European Union</td>
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<td>FOC</td>
<td>First Order Condition</td>
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<tr>
<td>GATT</td>
<td>General Agreement on Tariffs and Trade</td>
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<td>GATS</td>
<td>General Agreement on Trade in Services</td>
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<td>GP</td>
<td>Government Procurement</td>
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<td>HS</td>
<td>Harmonized System</td>
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<td>Abbreviation</td>
<td>Description</td>
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<td>IL</td>
<td>Import-Licensing Procedures</td>
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<td>IND</td>
<td>Industrialized countries</td>
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<td>ICJ</td>
<td>International Court of Justice</td>
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<td>ITO</td>
<td>International Trade Organization</td>
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<tr>
<td>LDC</td>
<td>Least Developed Countries</td>
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<td>MFN</td>
<td>Most Favoured Nation</td>
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<td>MAS</td>
<td>Mutually Agreed Solutions</td>
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<td>NT</td>
<td>National Treatment</td>
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<tr>
<td>OECD</td>
<td>Organization of Economic Cooperation and Development</td>
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<td>PI</td>
<td>Pre-shipment Inspection</td>
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<td>RPT</td>
<td>Reasonable Period of Time</td>
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<td>ROO</td>
<td>Rules of Origin</td>
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<td>SOC</td>
<td>Second Order Condition</td>
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<tr>
<td>SDT</td>
<td>Special and Differential Treatment</td>
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<td>SCM</td>
<td>Subsidies and Countervailing Measures</td>
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<td>SG</td>
<td>The Agreement on Safeguards</td>
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<td>TRIMs</td>
<td>Trade-Related Investment Measures</td>
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<td>TTIP</td>
<td>Transatlantic Trade and Investment Partnership</td>
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<td>TPP</td>
<td>Trans-Pacific Partnership</td>
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<td>UN</td>
<td>United Nations</td>
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<td>US</td>
<td>United States</td>
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<td>WP</td>
<td>Working Procedures</td>
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<td>WTO</td>
<td>World Trade Organization</td>
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1. Introduction

Before the establishment of the World Trade Organization (WTO), and right after the Second World War in 1945, many nations experienced the aftermath of war and felt an urgency to rebuild a shattered world into a better world, based on collaboration and security. In this new world order trade was seen as a cornerstone and an instrument to raise employment and create wealth for all. However, the destructive unilateral trade policies of the interwar period, after the passing of the Smoot-Hawley Act (1930), convinced most nations that the expansion of trade was possible only through collective actions and binding commitments. Ambitions were high and to ensure that such an undertaking would be successful, the creation of an International Trade Organization (ITO) that could provide the necessary organizational structure was proposed (United States. Department of State and Clayton, 1945). Over 50 countries worked together to establish the rules of global trade and bring ITO into existence, but in the end, the agreement failed to be ratified by the US after the Truman administration realized that it lacked both public and congressional support.

In the wake of this failed agreement, a smaller group of countries: Australia, Belgium, Brazil, Burma, Canada, Ceylon, Chile, China, Cuba, Czechoslovakia, France, India, Lebanon, Luxembourg, Netherlands, New Zealand, Norway, Pakistan, Southern Rhodesia, Syria, South Africa, the United Kingdom and the US, referred to collectively as the founding members, salvaged the commercial policy chapter of the ITO and implemented a provisional trade agreement called the General Agreement on Tariffs and Trade (GATT). Across eight trade negotiating rounds, the GATT expanded both its membership and commitments; in each round, several thousands in tariff concessions, worth several billions in trade, were exchanged. In the last round, the Uruguay round, large structural reforms were on the agenda, resulting in the establishment of a new ITO, named the World Trade Organization (WTO). At the time of this organisation’s inauguration, 128 countries had signed the GATT. Since then, 36 more countries, including major countries such as China and Russia, have joined the WTO. At the time of this writing, the WTO has been in operation for over 20 years and over 95% of world trade is now covered by this multilateral trade agreement. One of the major innovations in the WTO was its dispute settlement mechanism (DSM), which approached trade disputes between members in a formal and judicial manner. Although a DSM was also available in the
GATT, it was less formalized and dispute resolution gravitated towards diplomacy. The GATT DSM was, nevertheless, quite successful and utilized relatively often, but it had a crucial weakness that undermined the stability of the system.

The first complaint in the GATT came as early as 1948 and at that time, there were no established procedures for resolving complaints, other than requesting bilateral consultations under Art. XXII and Art. XXIII: 1 of the GATT. By the third complaint, however, the disputes were more formally assigned to working party groups—consisting of the parties to the dispute, a chairman and other interested parties—that were composed explicitly for the purpose of resolving the dispute. In 1952, a dispute was, for the first time, referred to a panel of experts for an independent assessment. This task also required the panel to write a formal report of their findings, similar to the current WTO DSM panel reports. Over the next 40 years, 181 panels were established and over 140 panel reports were issued (Busch and Reinhardt, 2003). However, because the GATT was a provisional agreement, it lacked proper organizational structure. Hence, decisions were made through positive consensus; one such decision was to establish a panel and to adopt the rulings contained in panel reports. Positive consensus implied that, any GATT member could block the adjudication process by rejecting the establishment of a panel, including the parties to the dispute. This rather serious flaw created much uncertainty in the system and was thus removed from the WTO in favour of negative consensus. In other words, panels were established and reports were adopted automatically unless all members agreed otherwise. This was the single most important change from the GATT DSM to the WTO DSM. Other structural changes included the establishment of explicit deadlines at every stage, more detailed procedures surrounding the DSM, and not least, a second instance court, the Appellate Body. So far, 537 complaints have been filed, or 24 complaints per year, compared to the 355 complaints in the GATT (1948–1994), or almost 8 complaints per year (Busch and Reinhardt, 2003). This outcome have led many to hail the DSM as the crowning achievement of the WTO.

However, despite the resounding success of the WTO DSM, some of the concerns that arose in the GATT DSM, as described in Tuthill et al. (1985) ten years before the establishment of the WTO, largely reflect today’s problems: delays in panel composition; long panel deliberations; the difficulty in finding qualified and sufficiently independent panelists in regards to nationality, experience and governmental interests, and issues for developing countries, such as equal access to the DSM, the lack of retaliatory power,
and fear of retaliation by larger nations. As the GATT DSM became more judicial through the establishment of panels, further issues emerged, such as the need for legal expertise and staff and the high cost of litigation. Why is this the case?

First, the legalization of the DSM sought to ensure equal access to dispute resolution, especially for poorer nations, by creating a system that relies on rules rather than power. However, while access is equal, it is still costly to successfully pursue disputes. At the end of the GATT, only approximately 30% of the contracting parties had been active in the GATT DSM and over 90% of the cases involved either the EU or the US (Tuthill et al., 1985; Hudec et al., 1993). Today, the share of active members has increased only slightly to 35%, while the EU and the US are involved in little over 70% of the cases. With the exception of South Africa, none of the African countries have initiated a dispute. Hence, while the frequency of use has increased substantially, the selection of participants remains relatively narrow, indicating that the cost of litigation continues to be an issue.

Second, due to the principle of positive consensus in the GATT, significant delays in both the composition of the panel and adoption of the panel...
On the other hand, panel deliberations have increased by an average of 100 days. Tuthill et al. (1985) reported that there was concern over the time it took for GATT panels to issue rulings. A GATT panel took an average of 9 months to complete a report (Figure 2), currently, a WTO panel takes an
average of 12 months—although this does not reflect improvements in efficiency as the level of complexity has increased. This is perhaps not surprising because the panel process in the WTO is the same as that in the GATT; namely, a new panel of judges is selected for each dispute. Although procedural improvements have been made around the WTO panel stage, such as explicit time-frames, operational rules and notifications, it is still difficult to find eligible and qualified judges who are prepared to spend the time and effort needed on, basically, a part-time assignment.

Lastly, the exceptionally long appeal in 2012, shown in Figure 2, was the beginning of a period of persistent delays caused by an increasing use of the DSM combined with limited staff capacity at the WTO. Although the frequent use of the WTO DSM has been seen as a positive development, as shown in Figure 3, this was a trend that, to some extent, began around
1978.\textsuperscript{1} Hence, even though the structural reforms in the WTO enabled more members to complain, it is likely that the WTO DSM was introduced at a time when the members were strongly committed to resolving trade conflicts in a constructive manner. However, today, this commitment is seemingly starting to wane because the above systemic problems risk undermining the system.

We begin this dissertation by introducing the reader to the WTO DSM and describing some of its salient features (Essay 1). Three of the essays concern the functioning of the panel such as the panel composition process and the identity of the appointed judges in both panels and the Appellate Body. We especially note the considerable role of the WTO Secretariat in supporting these judges (Essay 2). As the issue of delays is becoming more significant, we investigate whether there are any time-saving gains of replacing the ad hoc panels described above, with permanent panels (Essay 4). The problem of engaging developing countries in the DSM is studied by evaluating preferential treatment in panel composition (Essay 3). We conclude by taking a broader view of the DSM by assessing potential gains in trade of disputes for non-active members (Essay 5).

2. An essay on the DSM

The WTO Dispute Settlement System 1995-2016: A Data Set and Its Descriptive Statistics (Essay 1)

The essays contained in this dissertation revolve closely around the subject of the WTO DSM, but they also share another common feature: all the essays make use of the WTO dispute settlement data set. The project of constructing this data set was initiated by Henrik Horn and Petros C. Mavroidis over ten years ago, and was done in four waves: the first version was released in 2005, the second in 2007, the third in 2011, and the fourth and latest in 2016. I joined the project for the third wave in 2010 and continued by managing the fourth update. The vast majority of the data was obtained through the official documents associated with each dispute

\textsuperscript{1} Some early decisions on the dispute settlement during the Uruguay Round were implemented around 1989 on a trial basis. However, negative consensus when adopting panel reports remained. (BISD 36S/61)
(https://docs.wto.org). Some variables, such as the nationality of the panelists and appellate body judges were, however, obtained elsewhere. In Essay 1, we introduce the dispute settlement mechanism and describe different aspects of this data set. However, instead of summarizing the descriptive statistics therein, I will here describe the DSM process in detail, as it is a vital part in understanding the essays in this dissertation.

The DSM comprises five official instances: 1) Consultations, 2) Panel adjudication, 3) Appeal, 4) Implementation, and 5) Suspension of concession. The dispute is initiated when one or several WTO member(s), the complainant(s), files a “Request for consultations” with another member country, the respondent, which allegedly has violated a WTO provision. During a minimum period of 60 days, negotiations are conducted to settle the dispute bilaterally (Art. 4 DSU). At this time, other WTO members can ask to join the consultations if they have a substantial trade interest in the consultations (Art. 4.11 DSU), and are then referred to as co-complainants as they enter the dispute on the side of the complainant. If the two parties are unable to settle the issue within this time frame, the complainant may submit a request for “Establishment of panel” (Art. 6.2 DSU) to the Dispute Settlement Body (DSB) (Art. 6 DSU) and they will establish the panel at the following meeting (Art. 6.1 DSU). This launches the formal adjudication.

A panel is normally composed of three panelists2 and the two parties have 20 days after the panel was established to jointly appoint all judges. If there is no agreement, either party may relegate the decision to the Director-General (DG) (Art. 8.7 DSU). The Secretariat and DG play an important part in the composition process since they will suggest appropriate panelists for the case in question, and the parties are not allowed to oppose those nominations (Art. 8.6 DSU). One caveat with the official statistics is that the decision-making process is not transparent, and more likely than not, the DG will be asked to complete the panel rather than appoint all of them (Johannesson and Mavroidis, 2015).

WTO members are welcome to join these proceedings, but are then referred to as third parties. The panel work has a statutory deadline of six months, from the panel composition date (Art. 12.8 DSU), with a possible extension up to nine months. In practice, the average duration tends to be longer (Johannesson and Mavroidis, 2017). The panel will publish its findings (Art. 16.4 DSU) in a report to the DSB and its members, along with a

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2 The DSU do allow a total of five panelists. However, this has, to my knowledge, never been requested.
recommended course of action (Art. 12 DSU). There are some able practices within the panel process that are worth highlighting. It may happen that several similar disputes are litigated at the same time. In that case, the DSB may mandate that the disputes will be reviewed simultaneously by a single panel, and will either issue a single report for all individual cases or various reports for each (Art. 9.1 DSU).

Both the complainant and the respondent can appeal these rulings to the Appellate Body (AB) (Art. 17 DSU) and almost 62% of the complainants do so. If they abstain, the DSB will adopt the report as is. Otherwise, the AB will modify the panel report by either reversing or upholding the original findings. There is no external enforcement, so that failure to implement the recommendations of the panel and the AB can only be countered through further bilateral negotiations or retaliation, such as temporarily suspension of concession (Art. 22.2 DSU). The parties can at any time abandon adjudication in favor of a mutually agreed solution (MAS).

The WTO was established under three broad agreements: goods (GATT), services (GATS) and intellectual property (TRIPS). The two fundamental principles that govern the trading system are non-discrimination clauses that mandate Members to treat all trading partners equally. The first is the Most Favoured Nation clause (MFN) and is included in the main agreements as Art. I.1 of GATT, Art. 2 of GATS and Art. 4 of TRIPS. The second clause is National Treatment (NT), included in the agreements as Art. III.4 of GATT, Art. 17 of GATS (services) and Art. 3 of TRIPS (intellectual property). The majority of the trade measures, around 48% of our sample, concern alleged violations of Art I.1 GATT and Art. III GATT. The WTO allows some flexibility with MFN, such as trade remedy measures against products that are considered traded unfairly. Consequently, these issues have become frequently contested, in particular anti-dumping and countervailing duties. Other import-restricting measures include quantitative restrictions, safeguard measures, customs valuation, import duties, tariff-rate quotas and various domestic regulations.
3. Essays regarding the functioning of the panel

Black Cat, White Cat: The Identity of the WTO Judges (Essay 2)

The reformation of the provisional GATT to the WTO entailed a significant shift in how members resolve disputes. However, in one aspect, there has been little change in the DSM. Essay 2 more closely examines the judges who are appointed to the panel and the Appellate Body and discuss differences between these judges and the judges appointed in the GATT. We make two observations: first, in the GATT DSM, the contracting parties preferred to appoint government officials as panelists because they possessed the necessary expertise in trade policy matters (Tuthill et al., 1985). We show that the panelists who are called upon to serve in the WTO are, by and large, institutional insiders, governmental officials that are or have been delegates to the WTO in Geneva. In other words, the same judges that determined disputes in the GATT. However, as the WTO DSM turns into a more formal judicial system, the question arises of whether diplomatic negotiations should resolve cases or legal arguments. Unless the WTO members choose another path for the WTO DSM, the members should consider the importance of the legal background of the judges. We further discuss the incentive structure in place that encourages the WTO Secretariat to shoulder the main workload in writing panel reports, and for panelists to allow the WTO Secretariat to do so. We make this argument in light of the modest remuneration paid out to the panelists—in the case of governmental officials, no remuneration is given—and the considerable work they are expected to carry out, in parallel to their regular work.
The Effect of Panel Composition on Developing Countries’ Success Rate in the WTO Dispute Settlement (Essay 3)

The lack of progress in the Doha Round is a serious set-back for the WTO as a negotiating forum. It is also a set-back for developing countries in the WTO because the intention of the Doha round was to focus on issues that impede these countries’ participation in global trade and measures that would increase such participation. The developing countries constitute the majority of the WTO membership (80%); yet only a small share of them (20%) have participated as either a complainant or respondent (excluding Brazil, India, China and Russia, commonly referred to as BRIC). Essay 3 takes a closer look at the Special and Differential Treatment (SDT) provision Art.8.10 of the Dispute Settlement Understanding (DSU) and the role it plays in facilitating developing country participation. In disputes that involve a developing country and an industrialized country, Art.8.10 reserves a seat in the panel for a judge that is a citizen of a developing country. For
various reasons, there seems to be an a priori belief that Art.8.10 can aid developing countries in winning cases against richer members. However, when examining the data more closely, we actually observe a negative correlation between developing country panelists and success rate in the panel (Figure 4).

An explanation for Figure 4 could simply be that judges from developing countries directly reduce the chances that developing countries win in panel adjudication, but it is difficult to find plausible reasons for why this would be the case. Instead, we propose an alternative explanation, where the a priori belief that developing country judges are beneficial for developing countries is consistent with the relationship we observe in Figure 4. We argue that the underlying mechanism is a Yule-Simpson paradox such that the relationship between success rate and developing country judges is moderated by a third variable, namely the legal merits of the dispute. This variable will, however, affect the relationship in such a way that the signs reverse depending on whether we condition success rate on dispute quality or not.

It is the nature of Yule-Simpson's paradox that it cannot be resolved without a causal framework because the conclusion will be contradictory depending on the aggregation level of the data. Thus, to understand how the empirical relationship in Figure 4 arose, we formulate a simple model to illustrate a plausible causal mechanism. Our model focuses on disputes where a developing country faces an industrial country and we observe a dispute only when both parties decide to adjudicate. We introduce Art.8.10 into the model as a subsidy that reduces the variable litigation cost associated with producing evidence and argumentation. If the prevailing belief is that developing country judges help developing countries to win claims, then such a judge would be more valuable if the legal merits of their dispute are weak, which would motivate developing countries to push harder for a favourable panel composition. However, developing country judges cannot compensate for a poor case, hence we will observe a negative correlation between developing country judges and success rate, as shown in Figure 4.

I also apply my model to produce some additional results. A reduction in variable litigation costs will encourage developing countries to file more disputes as it becomes relatively cheaper to win cases. However, at the same time, the relative success probability decreases for the industrialized countries, which will cause them to settle more marginal disputes before they reach adjudication. As a result, the total number of disputes will decrease, even though the total number of complaints increases. In other words, developing countries will be more motivated to air their grievances when they
have a better chance of winning, and in the face of this disadvantage, the defendant will be more inclined to settle. An immediate consequence of this increase is more lower-quality cases, which in turn will decrease the average success rate for developing countries. Because both developing country participation rates and average success rates are observable, while early settlements of complaints are not, observable measures could be misleading regarding the effect of litigation support.

**Efficiency gains and time-savings of permanent panels in the WTO dispute settlement (Essay 4)**

The increasing use of the DSM, which has been seen as a sign of the legitimacy it enjoys among its members, has proved to be a double-edged sword. In addition to the increased number of complaints, the disputes are becoming more complex, which has led to a progressively heavier workload for the WTO DSM. In the last few years, it has become increasingly apparent that the system is close to reaching its capacity, which will inevitably cause delays. Several members, such as Canada and Korea, have raised this issue and in 2017 the Appellate Body chairman Ujal Singh Bhatia explicitly included the problem of delays in an address delivered at the release of the Appellate Body Annual Report 2016. For the first five years of the WTO dispute settlement, the average duration of the panel was 10 months, but in 2010–2014, the average duration increased to approximately 14 months (Figure 5). (Note that the statutory deadline of the panel is six months; thus, prolonged panel deliberations were an issue from the start.) An increase in four months may not appear extreme, but in high-stake disputes, every month is considered costly in terms of lost businesses, jobs and trade. However the popularity of the DSM has now also become an issue for the previously timely Appellate Body (Ehlermann, 2017), and as disputes are becoming increasingly challenging, the WTO may be compelled to consider more drastic solutions.

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3 WT/DSB/M/362; WT/DSB/M/367
In this essay, we examine whether a move towards a permanent panel could make the panel process more efficient, and expedite the adjudication of disputes. Because we do not have a permanent panel for comparison, we analyze certain features that characterize such panels. In particular, we examine the potential time-saving gains of experienced panelists and panels that consist of former co-panelists. Conventional wisdom states that experienced panelists work more efficiently and that this efficiency should expedite panel deliberations. Furthermore, experience is also expected to raise the quality of the panel reports such that fewer rulings are reversed by the Appellate Body. We hypothesize further that already established working relationships among co-panelists may facilitate the work.

We use two outcomes to measure the time that it takes to examine a dispute: the first outcome is the time that it takes for panels to issue panel reports, and the second outcome is an efficiency measure that divides the first measure with the square root of the total number of claims in a dispute. We reason that although it takes time to examine claims, the relationship...
between duration and the number of claims is not necessarily linear, as it is
reasonable to assume that the first few claims in a case take much more
effort than the last few claims. Hence, to capture such economies of scale, I
assign different weights to the claims by applying the above square root
equivalence scale to duration. I assess these variables in a straightforward
OLS and median regression.

I make three observations. First, permanent panels ensure that the panel-
ists acquire the necessary experience in the DSM, and it is assumed that this
will improve both the efficiency and quality of the ruling (Busch and Pelc,
2009). Our results show, however, that aggregate panel experience has only
trivial effects on efficiency and no effect on the time that it takes to issue
panel reports. Second, a large body of case law should compensate less ex-
perienced panelists and expedite the writing of a panel report, but we do
not find such effects. Third, former co-panelists are associated with a rela-
tively substantial decrease of 40 days but there is no impact on efficiency.
In conclusion, considering permanent panels will ensure that the co-panel-
ists establish a work relationships, a permanent panel could result in shorter
panel deliberations. However, this does not imply that a permanent panel
will meet the deadlines as a matter of course; as disputes become more le-
gally complex, it is likely imperative to also increase resources concurrently
to mitigate delays more effectively.

4. An essay on trade and disputes

Are WTO disputes public goods? —Dispute effects on the
membership (Essay 5)

Currently, it is clear that the DSM is one of the most active international
dispute settlement systems in the world. However, by 2016, 40% of the
members had never participated as complainant, respondent or third party.
These non-active countries are mainly the least developed African nations.
However, non-participation does not necessarily imply that there are no ex-
ternal benefits to the membership. The WTO is based on non-discrimina-
tion, which implies that trade-liberalizing outcomes in the DSM will benefit
the members as a whole given that they have an interest in the market in
question. However, the selection of disputes could also be chosen so nar-
rowly that it serves only the interests of the complainants and co-complainants. In Essay 5, we try to quantify whether such positive external benefits exist.

A simple strategy to measure possible trade gains could be to compare import flows in the disputed markets before and after a dispute. In such an approach, however, we would not be able to credibly separate dispute effects from other time-varying effects that are unrelated to the dispute. For that reason, we employ a Difference-in-Differences (DD) approach. The basic principle of DD estimation is to measure changes on the disputed markets by comparing these markets to a sufficiently similar market that was not exposed to a dispute. This enables us to eliminate any time effects that impact both markets, and we are, ideally left with only the causal dispute effect. The validity of the inference is predicated upon the assumption that the disputed markets would have evolved as the comparable import markets that we use, had the dispute not taken place. We use two groups of comparable import markets: first, we identify all exporters that trade in the disputed products with the respondent. Then, we identify all other export destinations, of the same products, that are not the respondent; these export destinations constitute our primary control markets. However, because these primary control markets involve trade flows from exporters that were affected by a dispute, there is a possibility of spillover effects from the respondent markets to the primary control markets through trade diversion. In other words, if exports to the respondent’s market are restricted by an actionable trade measure, exporters may divert some of their excess goods to other markets, and thus, be included in the primary control markets. The validity of DD, however, rests on the assumption of no spillover effects, and to validate our primary control markets, we also define a group of secondary control markets. These import markets do not share exporters with the respondents and we argue that it is more plausible that these markets are not directly affected by the disputes. Although we use them to estimate potential spillover effects on the primary control markets, we also use them to validate results using our primary control markets.

Here, we summarize our three key findings. First, we found positive and significant effects on the respondents’ markets of around 23%. But because we also found positive effects on the primary control markets, i.e. spillover, our main specification used only secondary control markets. Second, after we divided the disputes into adjudicated and non-adjudicated disputes, we found that the positive disputes effects we found previously only pertained to the latter. For those cases, dispute effects for non-active members were
approximately 32% on average. Third, we found no dispute effects for disputes that escalated to panel. This is perhaps not surprising since panel adjudication takes longer to conclude and the disputes are likely more contentious. Furthermore, Johannesson and Mavroidis (2017) show that adjudication takes around two years. Thus, the result of a dispute may not be observable within the five-year post-dispute period we investigated. Thus, the positive effects for non-adjudicated disputes may indicate that these disputes concern trade measures with a broad impact on the membership (Bown and Reynolds, 2015). Furthermore, in case the secondary control market is biased, we also calculate the differential dispute effect between respondents and primary control markets. We find that the absolute effect is 20 percentage points higher for respondents than for the other export destinations for the same products.

5. Methodological considerations and Limitations

This dissertation relies heavily on the WTO dispute settlement data set, and many of the methodological considerations arise from it. Although most of the variables from this data set are unambiguous, such as dates, names, and nationalities, there are still qualitative aspects, such as legal complexity, ability of the judges, and the validity of the claims, that are not easily captured and therefore require some further considerations.

For Essay 2, we extracted the names of the judges and their citizenship. These variables were straightforward but the main variables of interest—educational background and prior contact with Geneva—required additional research. Information on educational background of the judges was taken from their curriculum vitae and online biographies, published on various official sources such as governmental sites, law firms and academic institutions. To uncover whether these judges have had a prior connection to Geneva was, on the other hand, more difficult. In addition to examining the aforementioned curriculum vitae and official biographies, we also for judges’ names on official WTO documents that were dated before their appointment. We were very cautious in constructing this variable and used only official documentation as evidence of such connections. Although we conclude that approximately 66–76% had been in contact with the WTO in some way, it is very likely that all judges had some prior informal contact with the WTO or an individual in the “Geneva crowd”.

LOUISE JOHANNESSON  Settling disputes at WTO
In Essay 3, we calculate the success rate as the share of won claims by the developing country. In a request for the establishment of a panel, a complainant must outline the offending trade measure and the provisions it purportedly violates. Each claim is then examined by the panel, which either ruled in favour of the complainant or in favour of the respondent. The panel also has the option of exercising judicial economy and refraining from examining a claim because it is, for example, not within the panel's terms of reference according to Art.7 of the DSU or because the claim is considered redundant in relation to other claims. I exclude these judicial economy claims when constructing the panel success rate for two reasons: first, we do not know whether these claims are won by the complainant or the respondent because there is no formal ruling. Second, these claims are, in practice, invalid claims and including them would simply inflate the denominator.

In this essay we also provide empirical evidence for Yule-Simpson's paradox, using the number of claims as a proxy for dispute quality. Although there is a potential to conduct a more elaborate empirical examination, such an examination is beyond the scope of this essay. An alternative to using a proxy could have been to thoroughly assess the quality of each case and then reduce it to a one-dimensional measure, and include it in a quantitative analysis. However, such an approach would require extensive legal and statistical expertise, making such an endeavour better suited for a complementary interdisciplinary research project.

In Essay 4, we utilized the WTO dispute settlement database to investigate whether certain features that characterize a permanent panel could save time. One of the main contributions of this essay is the use of an equivalence scale of duration to account for economies of scale. That is, the marginal time needed to examine each claim in a dispute decreases as the number of claims in a dispute increases. The basic assumption is that claims in a dispute are not independent because they all concern the same issues. Equivalisation is a common technique in the research area of poverty and inequality, and is also applied to household income. Depending on context and country, different kinds of equivalence scales take into consideration different household features such as number of children relative to the number of adults and children's ages (see for example Aaberge and Melby, 1998). Although we drew inspiration from this literature and refer to the measure as equivalised duration per claim, it should be mentioned that the theoretical foundation for equivalisation as applied to household income is completely unrelated to our application. In other words, the choice of using square root
equivalisation is not based on a formal theory; rather, it is an empirical technique to capture economies of scales.

For Essay 5, we used the year of the disputes the identity of the parties involved, including co-complainants; and the products under dispute. Although the WTO dispute settlement data set includes product codes of the Harmonized System (HS), the record is incomplete due to difficulty in obtaining all the HS codes at the time of constructing the data set. Instead, we supplemented this variable with a more extensive record compiled by Bown and Reynolds (2015). Although HS codes up to 6-digits are available in both data sets, we decided to limit ourselves to 4 digits since the probability of zero trade flows increases as the product level becomes more detailed. The trade-off is more noisy data.

When conducting the empirical analysis, one of the main issues was the handling of missing values as UN Comtrade does not report zero trade flows. We decided to treat missing values as zero trade flows for the reasons outlined in Essay 5. However, an alternative approach is to restrict the sample to only include countries with a complete trade record rather than relying on an assumption regarding the missing trade values. The disadvantage of this approach is, of course, that the sample of countries would be highly selected, mostly consisting of industrialized countries with better institutional capacity to maintain such records. This approach would also measure trade changes only at the intensive margin, as the number of exporters would be fixed. The problem of biased selection would likewise arise if we instead decided to treat all missing values as true missing, and simply eliminate them from the sample.

It might perhaps seem reasonable to reference the standard gravity model as the functional form of the empirical model in Essay 5, since we use bilateral trade flows. However, the DD estimation is a non-parametric approach and given that we have chosen a suitable control group (manifested in parallel pre-dispute trends), it is not necessary to model the determinant of trade flows; the DD method will estimate the causal effect regardless. In our case, the unconditional pre-dispute trends were not valid; thus, we included

\footnote{Data set can be found here: http://econ.worldbank.org/external/default/main?pagePK=64214825&piPK=64214943&theSitePK=469382&contentMDK=23595500}

\footnote{See UN Disclaimer when using UN Comtrade, available at: https://comtrade.un.org/db/help/uReadMeFirst.aspx}
time-fixed, country-fixed, country-pair-fixed, dispute-varying and country-varying effects to achieve the required parallel pre-dispute trends. However, these fixed effects should not be interpreted as the usual control variables in the context of a gravity model, such as common language, common border, land-locked country, country size, and distance. While the gravity model variables explain bilateral trade flow between two countries, the controls in a DD model account for differences between the treatment and control groups. Thus, the theoretical connection between the gravity model and our DD model is not clear.

6. A look forward

The three main domains of the WTO are trade negotiation, monitoring and dispute settlement (Davey, 2014). However, as the WTO has largely failed to bring about new substantial commitments since the Uruguay Round, the dispute settlement has now become the most distinguished feature of the organization. In 2017, however, it became clear that the DSM faces challenges that may cast doubt on its future. For some time, the US has been dissatisfied with certain systemic issues in the DSM, which culminated when the US blocked the re-appointment of Appellate Body judge Seung Wha Chang from South Korea. Although this was the second time that the US blocked the re-appointment of an Appellate Body judge, at the first occasion judge in question, Jennifer Hillman, was a US national. The decision to block a judge from another member country may have been perceived as a hostile move as it drew the ire of the South Korean delegation. Furthermore, the US went one step further and made it clear that they would also block any new appointments until the systemic issues had been addressed. Now, three of seven positions in the Appellate Body are left vacant as the terms of Ricardo Ramirez Hernández from Mexico and Peter van den Bossche from the EU ended on 30 June and 11 December 2017, respectively, and with the sudden resignation of Hyun Chong Kim from South Korea on 31 July 2017. In September 2018, yet another member, Shree Baboo Chekitan Servansing from Mauritius, is up for re-appointment, and if he is blocked as well, the

8 "WTO Chief Warns Of Risks To Trade Peace" (2017). Available at: https://www.ft.com/content/3459f930-a532-11e7-9e4f-7f5e6a7c98a2.
appellate body will be reduced to only three members. If this comes to pass, the Appellate Body will be unable to handle new appeals without extreme delays, effectively shutting down the appeals court.  

The two issues that concern the US are perceived judicial activism of the Appellate Body, and the practice by which the Appellate Body members complete cases even after their terms have expired. (This is the current situation for former Appellate Body member Ricardo Ramirez Hernández.) Their objection against Appellate Body overreach reveals a profound divide between the US and many of the other WTO members, concerning the nature of the WTO contract. The current United States Trade Representative Robert Lighthizer explained that the US fundamentally disagrees with an “evolving governance” where the Appellate Body can, allegedly, create new obligations so as to pursue the “spirit” of the agreement. Their position is that, the WTO agreement contains a specific set of carefully negotiated commitments and that the task of the Appellate Body should be to enforce only what is written.

In light of these recent events, the role of the WTO in international trade may fade in prominence. Indeed, there has been a steady increase in alternative arrangements outside of the WTO, such as preferential, regional and mega-regional trade agreements—most notably, the Transatlantic Trade and Investment Partnership (TTIP) and Trans-Pacific Partnership (TPP)—which may signal that the members already consider the WTO passé. Yet, the members’ frequent use of the DSM shows a commitment to the system. Thus, the members may feel compelled to act if the Appellate Body shuts

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9 Part of Art. 17.2 of the DSU reads as follows: “It [appellate body] shall be composed of seven persons, three of whom shall serve on any one case.” It seems as the word “shall”, in the case of how many serve on a case, is generally interpreted as to mean “must”. But the interpretation of “shall” in regards to the number of persons that comprise the appellate body appears vaguer. It seems difficult to apply this provision in such a way to nullify the appellate body. In practice, the fact that there are vacancies between appellate body member’s terms does not necessarily imply that the appellate body consists of less than the required number.


11 TPP is currently under re-negotiation as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) after the withdrawal of the US.
down and may reduce the DSM to a single court. In such a situation, it is critical for the panel to function efficiently, and the WTO may therefore have to reassess its established procedures. As discussed in Essay 2 and Essay 3, the panel selection process can be time-consuming because of the restrictions that apply limit the pool of eligible judges. Reforms such as implementing a permanent panel could be an option to expedite the process, as shown in Essay 4. Although large parts of this dissertation call attention to systemic shortcomings of the DSM, its success is undeniably due to its actual usefulness. Thus, to facilitate and understand how to resolve trade disputes constructively, continued research into the various procedural aspects of the WTO is needed.

References


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