The Design of Trade Agreements (DESTA) Explanatory note on DESTA Indices

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1 Introduction

This explanatory note aims at providing specific information on the DESTA indices, including proxies of the depth, flexibility and strength of Dispute Settlement Mechanisms of a range of Preferential Trade Agreements (PTA). This dataset is derived from the main DESTA dataset. For more information on the variables referred to in this note please refer to the main DESTA Codebook (available here, under the "Content Coding" section).

2 Depth

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We use two different measures to operationalize depth.

$[depth_index]$

The first measure of depth is an additive index that combines seven key provisions that can be included in PTAs – [full_fta], [standards], [investments], [services], [procurement], [competition], and [iprs] (see Dür et al. 2014). The first provision captures whether the agreement foresees that all tariffs (with limited exceptions) should be reduced to zero (that is, whether the aim is to create a full free trade area) and is created. The other six provisions capture cooperation that goes beyond tariff reductions, in areas such as services trade, investments, standards, public procurement, competition and intellectual property rights. For each of these areas, we code whether the agreement contains any substantive provisions. A substantive provision, for example, is a national treatment clause in the services chapter. A statement that the contracting parties desire to open their services markets, by contrast, does not count as a substantive provision.

Each of the seven key provisions are derived from variables available in the main DESTA database. For more information on these, please refer to the main Codebook (available here, under the "Content Coding" section).

- i) [specdepth_full_fta] is derived from [mar_typedepth].
- ii)[specdepth_standards] is derived from [sps_prov] and [tbt_prov].
- iii) [specdepth_investments] is derived from [inv_chapter], [inv_reference_service] and [inv_reference_bit].
- iv) [specdepth_services] is derived from [ser_specific].
- v) [specdepth_procurement] is derived from [proc_prov].
- vi) [specdepth_competition] is derived from [comp_chap].
- vii) [specdepth_iprs] is derived from [ipr_nt], [ipr_mfn], [ipr_scope_substantial_dummy],
- [ipr_specific_enforcement_dummy] and [ipr_specific_prov].

$[depth_rasch]$

The second measure of depth relies on latent trait analysis. Latent trait analysis is a type of factor analysis for binary data (Bartholomew et al. 2011). Doing so allows us to deal with highly correlated data and to account for the fact that not all items are of equal importance in establishing the extent of countries' commitments. Standard factor analysis is based on Pearson correlation and thus not applicable to the binary data included in our dataset. We therefore opted for latent trait analysis, a method developed for binary data. The specific approach that we use is known as the Rasch model, which is frequently applied in psychometrics, for example to measure intelligence (Bond and Fox 2007). A major assumption of the Rasch model is that the items are related to a single underlying dimension; we therefore only included variables in the analysis that are theoretically related to depth. We use a total of 49 variables that theoretically are related to the depth of an agreement (these variables pertain to such aspects as services liberalization, trade-related investment measures, intellectual property rights and standards) to arrive at a measure of depth. The full list of variables are listed below. For more information on these, please refer to the main Codebook (available here, under the "Content Coding" section).

- 1. [comp_chap]
- [comp_general_body]
 [comp_info]
- 4. [comp_not_distort]
- 5. [comp_soe]
- 6. [comp_state_aid]
- 7. [compcoverage1]
- 8. [inv_acquisition_merger]
- 9. [inv_est_oper]
- 10. [inv_mfn]
- 11. $[inv_nt]$
- 12. [inv_post_est_oper]
- 13. [inv_pre_est_oper]
- 14. [inv_reference_trims]
- 15. [inv_sect_cov1]
- 16. [inv_stand_treat1]
- 17. [inv_transf_pay]
- 18. [ipr_bern]
- 19. [ipr_copy_right]
- 20. [ipr_gen_stat1]
- 21. [ipr_geo_indic]
- 22. [ipr_mfn]
- 23. [ipr_paris]
- 24. [ipr_pharma]
- 25. [ipr_phono]
- 26. [ipr_rome]
- 27. [ipr_specific_prov]
- 28. [ipr_trips_1994_dummy]
- 29. [proc_national]
- 30. [proc_transparency]
- 31. [proc_wto]
- 32. [procprovi1]
- 33. [ser_gatsref]
- 34. $[ser_mfn]$
- 35. [ser_nonestablishment]
- 36. [serapproach1]
- 37. [serreview1]
- 38. [servicechap1]

- 39. [servicesnationaltreat1]
- 40. $[sps_coop]$
- 41. $[sps_wto]$
- 42. [spsharmon1]
- 43. [tbt_coop]
- 44. [tbt_distort]
- 45. [tbt_intstand]
- 46. [tbt_wto]
- 47. [tbtharmon1]
- 48. [temp_inv_mov_bus_per]
- 49. [temp_ser_movement]

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3 Flexibility

Please cite as: Baccini, Leonardo, Andreas Dür, and Manfred Elsig (2015). "The Politics of Trade Agreement Design: Revisiting the Depth-Flexibility Nexus". *International Studies Quarterly*, 59(4): 765-775.

[flexescape] Long-term flexibility

This can be used by parties in the future to protect against unforeseen developments without breaching the agreement. We measure this variable using a simple additive index of the presence or absence of four flexibility provisions in PTAs: a provision allowing for the suspension of tariff cuts in case of balance of payments problems, a general safeguard provision, a provision allowing for the imposition of countervailing duties, and a provision allowing for the imposition of anti-dumping duties. In the absence of these provisions, a country that suspends its tariff cuts or imposes anti dumping and countervailing duties for goods covered by the agreement is in breach of the agreement. These four provisions thus serve as escape clauses. The index can range from 0 to 4.

[transition] Short-term flexibility

We operationalize short-term flexibility relying on the maximum number of years that countries are allowed to achieve the liberalization of tariffs envisaged in the agreement. The longer the transition period, the more time exists for import competing groups to adjust to increased competition. Phase out periods for tariff liberalization range between 0 years (all tariffs are liberalized at the date of entry into force of an agreement) and 20 years (usually for a selected number of sensitive products).

[flexrigid]

We further provide an additive measure consisting of eight variables: a provision measuring whether parties agreed on GATT/WTO provisions on safeguards, a provision calling for a duration (and extension) of safeguard duty that is different from GATT/WTO, one allowing safeguard measures only during a transition period, another provision allowing safeguard measures on products up to the MFN duty or the temporal suspension of a duty reduction (a measure that controls for the scope and degree of the measure taken), a provision where parties agree on a de minimis dumping margin (or dumped volume) that differs from the GATT/WTO, refere to GATT/WTO, and a provision whether the parties develop a common policy on subsidies. Thus, this measure indicates how rigid flexibility is. A score of 8 means high and a score of 0 no rigidity concerning flexibility.

Bibliography

Baccini, Leonardo, Andreas Dür, and Manfred Elsig (2015). "The Politics of Trade Agreement Design: Revisiting the Depth-Flexibility Nexus". *International Studies Quarterly*, 59(4): 765-775.

4 Strength of Dispute Settlement Mechanisms

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We measure the strength of the dispute settlement mechanism (DSM) in a PTA with two indices, which are comprised of six components.

a) The two indices are:

[enforce] Strength of DSM index

This is a simple six-category index of the strength of dispute settlement for all PTAs in our data set, creating by summing all six of the components discussed in b) below. This index can range from 0 to 12, but the largest value maxes out at 9.

[enforce01] Standardized Strength of DSM index

This is a more standardized six-category index that forces all components to have equal weight. Here we take the same six components below, but instead of adding the raw values for each we standardize them all on a 0-1 scale, resulting in an indicator ranging from 0-6. For the first component (i) we code 1 if there is a delegated third party dispute settlement mechanisms (arbitration, standing body), otherwise the value is 0.

b) The six components that comprise these indices are as follows:

i) The first component captures the extent to which dispute settlement authority is delegated to a thirdparty, legal body. The lowest category (0) includes the scenario in which there are no provisions for dispute settlement or in which dispute settlement provisions exist but specify only consultations and/or mediation. A value of 1 is assigned to PTAs that specify only ad-hoc arbitration as a legal dispute settlement option, whereas the largest value of 2 is reserved for PTAs that create a standing body for dispute settlement.

ii) The second component emphasizes the ability of a complainant state to choose the dispute settlement venue. PTAs are given a 0 for this component when they fail to specify anything about multiple fora and forum choice. The next category (1) indicates scenarios in which the complainant is allowed to choose the forum, yet they can only pursue settlement in one forum, thereby excluding ex post the use of an alternative forum. Finally, the highest value, given a value of 2, is when the complainant chooses the venue and there are no restrictions on the use of multiple fora.

iii) A third element is the method by which the chairman of any judicial panel is selected, since effective dispute settlement is more likely in PTAs that allow for the swift selection of an unbiased chair that is not beholden to the interests of the state parties. Among the four options for chairman selection, the highest value of 2 is given to PTAs that specify either of the following: an outside actor (an international organization/secretary-general) selects, or the chairman is chosen "by lot". Next in line is the scenario in which the party-appointed arbitrators select the chairman (coded as 1). All remaining PTAs, coded as 0, are those that specify only bilateral consultations as the method of selection.

iv) The fourth component is a 0 vs. 1 variable that captures whether the DSM in a given treaty specifies any time limits for the dispute settlement process, whether overall and/or for particular stages (i.e., pre- and post-award). The specification of time frames encourages a faster dispute settlement process and thus should enhance compliance with obligations.

v) The fifth component explores the extent to which post-award sanctions can be used to effectively implement awards. Our empirical indicator for this subcomponent is a four-point, additive scale that combines values for four 0 vs. 1 indicators (Does the PTA contains a sanctions provision? Can the complainant choose the level of retaliation? Is same-sector or cross-retaliation allowed? Is monetary compensation specified?)

vi) The sixth component examines whether the dispute settlement provision applies broadly to all areas covered by the agreement, or whether some areas (i.e., trade remedies, safeguards, some forms of services, temporal entry of workers, SPS and TBT, competition policy, and investment) are excluded. PTAs with at least and arbitration mechanism without DS exclusions are given a value of 1, whereas those that contain exclusions or do not have a third party dispute settlement are coded as 0.

Bibliography

Allee, Todd, and Manfred Elsig (2016). "Why Do Some International Institutions Contain Strong Dispute Settlement Provisions? New Evidence from Preferential Trade Agreements". Review of International Organizations, 11(1): 89–120.