

Appendix B:

For "Better In than Out? Canada and the Trans-Pacific Partnership"

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Quantifying Liberalization of Services Trade in the TPP

To quantify the impact of services trade liberalization, we rely on recent advances in constructing datasets on services trade restrictions, and on the empirical analysis of the impact on services trade using indexes constructed on the basis of these datasets. The Services Trade Restrictiveness Index (STRI) database developed by researchers (Geloso Grosso et al., 2015) at the Organization for Economic Cooperation and Development (OECD) covers 18 services and 42 countries including 7 of the 12 TPP parties (Australia, Canada, Chile, Japan, Mexico, New Zealand, and the United States). As regards the non-covered countries, we construct indexes for Singapore and Vietnam, use Chile as a proxy for Peru, and Indonesia as a proxy for Malaysia.

The GATS Trade Restrictiveness Index (GTRI), also developed at the OECD (Miroudot and Pertel, 2016), is a parallel index that measures a country's services trade regime based on what it has bound under the WTO' General Agreement on Trade in Services (GATS).

The difference between the STRI and the GTRI is referred to as "water" in the GATS; the greater the amount of "water", the more flexibility a country has to make its regime more restrictive to foreign parties — and by the same token the more uncertain is the actual market access that the STRI indicates. The GTRI lacks estimates of water for the financial services and insurance sectors; accordingly, we round out our estimates of water by working up our own rough estimates in these sectors.

The STRI/GTRI quantify the variety of regulatory measures potentially affecting trade in services in one composite index of restrictiveness. The STRI (GTRI) scores take values between zero and one, where one represents a totally closed (unbound) sector and zero a fully open (bound) sector.

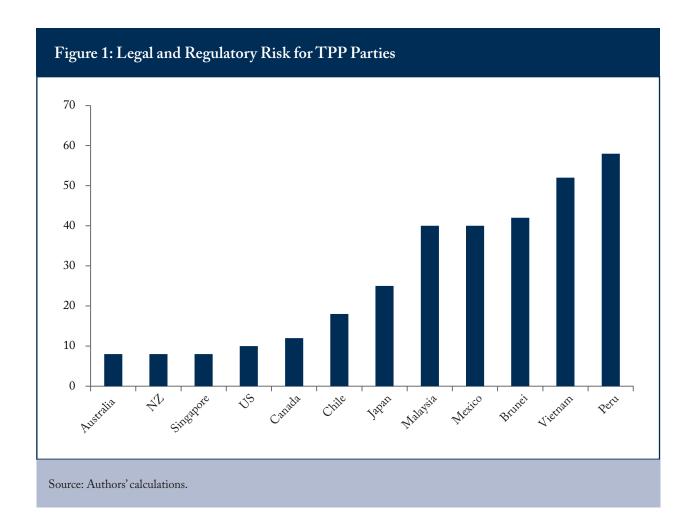
In some FTAs, the parties clarify that they are not binding beyond their GATS commitments; this reservation is typically implemented through a clause in the Non-Conforming Measures Annex to assure there is no binding beyond the previously GATS negotiated commitments. A typical phrasing is as follows:

The [Member] reserves the right to adopt or maintain any measure that is not inconsistent with the [Member's] obligations under Article XVI of the General Agreement on Trade in Services as set out in the [Member] Schedule of Specific Commitments under the GATS.

Although this clause does not make any changes to the current level of regulations, it reserves considerable policy flexibility, as it allows the member to revert back to any level from the current level of practice (current STRI) to as low as the GATS level. Similarly, this creates a level of uncertainty for foreign firms.

In developing the TPP policy shock for services, we proceed as follows:

NTBs, as quantified by gravity-model-based analyses, implicitly reflect both the effect of actual restrictions
and of "water," as measured by the difference between the GTRI and the STRI (that is, the difference
between bound commitments and applied practice).



- On the basis of a regression analysis of the effect of bindings (Ciuriak and Lysenko, 2016), we assume
 that the STRI's actual market restrictions have twice the restrictive power as an equivalent amount of
 "water."
- Accordingly, we adopt the following formula: Total NTB = α (STRI + 0.5*Water), where α is a coefficient that scales the index-based measure to the ad valorem equivalent of country-sector specific NTBs developed for the World Bank by Jafari and Tarr (2014).

The applied methodology gives the same relative weight to "water" to all TPP parties. Ideally, the weight given to water would vary with a country's regulatory policy risk profile, which determines the likelihood that the extent of policy risk implied by the lack of binding will be actuated.. The interaction between water and a country's general regulatory risk is, however, an open research issue. Overall, weighted by GDP, the TPP region is a zone of relatively low legal and regulatory policy risk (see Figure 1), implying that this region's mean weighting for water should be somewhat lower than globally. However, we did not attempt to introduce such a refinement in the present study. By the same token, our estimated impacts of services bindings may be biased upwards. There are a number of other caveats concerning these estimates.



- (a) The policy shocks that we derive are based on a methodological first attempt to capture the effect of a legally-binding trade treaty text on measured indexes of trade and investment restrictiveness, both in terms of changing applied practice and in terms of binding existing practice. This methodology will likely evolve.
- (b) We rely on existing GTAP elasticities of substitution to translate the measured reductions in services trade barriers into trade impacts. It would be preferable to have new elasticities of substitution estimated based on the response of trade to changes in the STRI and our composite NTB index that includes uncertainty.
- (c) The weighting assigned to uncertainty relative to actual restrictions arguably should vary across TPP parties depending on the extent to which the countries vary in terms of general policy risk.
- (d) Further, we calculate the binding effect for some countries based on proxies.
- (e) And we do not take into account most-favoured nation (MFN) clauses in other FTAs that would require TPP parties to extend TPP-driven liberalization to third parties with whom TPP parties have such agreements; this could qualify the preferential impacts.

Most of the caveats concerning the services sector impacts point to lower rather than larger trade gains – e.g., the TPP region is characterized by well-established policy frameworks with low country risk of arbitrary policy change that would give businesses pause about taking the plunge to commit funds to establishing a market presence.