ASSESSING TRADE IN SERVICES
LIBERALIZATION

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VI CONFERENCIA REDLAS
Tendencias y perspectivas para la producción y el comercio de servicios en América Latina y el Caribe
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Introduction

• The last decades have seen an important growth of the service sector. While in 1995 services share of world GDP rose 60.9%, in 2016 they accounted for 70.5% and over 75% in OCDE economies.

• Trade in services has witnesses an exponential growth in the last decades. Now-a-days, international services transactions include various activities such as transport, telecommunications, financial services, education, health care, or business oriented services.

• This growth has been accompanied with increase liberalization. Following the General Agreement of Trade in Services (GATS) negotiated in the Uruguay Round, and integral part of the World Trade Organization (WTO), a number of preferential trade agreements including services provisions have been established.
Figure 1. World trade in services. 1990 – 2014.
By sector
Figure 2. Preferential trade agreements with services provisions. Notifications to the WTO
Despite the relevance of the service sector in international trade, most research has focused on trade in goods. Assessments of trade agreements including services provisions have been scare, and most of them refer only to the policy implications of their structure or the number of sectors included.

We aim to build a new database measuring the liberalization extent of commitments included in multilateral and preferential trade agreements. This database will allow us not only to assess the level of liberalization comprise in each agreement, but empirically test their impact in trade and economic growth.
Previous studies on services liberalization: Sectorial approach

- Mattoo et al. (2001)
  - GATS - Domestic policies
  - Financial services & Basic telecommunications

- Geloso et al. (2015)
  - Domestic policies
  - 18 sectors

- Sorsa (1997)
  - GATS
  - Financial services

- Qian (2006)
  - GATS
  - Financial services

- Mattoo (2000)
  - GATS
  - Financial services
Previous studies on services liberalization: General assessments

• Hoekman (1996)
  – Assessment of GATS commitments after the termination of the Uruguay Round.

• Houde et al. (2007)

• Fink & Molinuevo (2008)

• Wignaraja et al. (2013)

• Roy et al. (2007) and Marchetti & Roy (2008)
  – Using the methodology developed by Hoekman, they assess GATS and PTA’s commitments.
Despite its contribution, Marchetti & Roy`s database does not allow us to study the impact of services commitments on trade or economic growth.

The nature of services commitments, similar to non-tariff barriers liberalization for goods, does not permit a direct quantification of its impact; therefore a scoring system, based on a qualitative analysis of commitments should be implemented.

The objective is to create liberalization indexes for services exports and imports:

\[ SL_{i,t}^x \]

Services exports: \( SL_{i,t}^x \)

\[ SL_{i,t}^m \]

Services Imports: \( SL_{i,t}^m \)
\[ GATS_{i,t} = \sum_{k=1}^{m} \alpha_k * \gamma_c * \vartheta_{i,k,t} \]

\( \vartheta_{i,k,t} = \) Liberalization score of country \( i \), in sector \( k \), for year \( t \).

\( \alpha_k = \) sector \( k \) weight

\( \gamma_c = \) Country \( c \) horizontal commitments index

**Horizontal commitments**

<table>
<thead>
<tr>
<th>0</th>
<th>( \leq \gamma \leq 1 ),</th>
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<tbody>
<tr>
<td>where:</td>
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<tr>
<td>0</td>
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**Sector commitments**

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Commitments

- As stated by WTO, limitations may be imposed on the number of services suppliers, service operations or employees in the sector; the value of transactions; the legal form of the service supplier; or the participation of foreign capital, amongst others.
GATS Horizontal commitment ($\gamma_c$) example

**Argentina**

Only for mode 3, market access:

Acquisition of land: unbound in frontier areas (150 km. in land frontier areas and 50 km. in coastal areas)

**Cuba**

Limitations on Market Access

1,2,3,4) Foreigners must pay commercial service transactions, however the services are supplied, in convertible currency unless otherwise authorized

2) Consumption abroad will be subject to all measures, including exchange regulations, which are applicable at any particular moment to the movement of human consumers or consumers living in Cuba and to the consumption of services abroad by those consumers

Limitations on National Treatment

1,2,3,4) Taxes and charges on the supply of services by foreigners are paid in local currency, but there must be an equivalent amount in convertible currency, unless otherwise authorized

2) Consumption abroad will be subject to all measures, including exchange regulations, which are applicable at any particular moment to the movement of human consumers or consumers living in Cuba and to the consumption of services abroad by those consumers
GATS Horizontal Commitments ($\gamma_c$)
## GATS Legal services \( \nu_{i,k,t} \) - example

<table>
<thead>
<tr>
<th>Chile</th>
<th>New Zealand</th>
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<tr>
<td><strong>Limitations on Market Access</strong></td>
<td><strong>Limitations on National Treatment</strong></td>
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<tr>
<td>1) Unbound</td>
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<td>4) Unbound, except as indicated in the horizontal section</td>
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Example: GATS Legal services commitments ($\vartheta_{i,k,t}$)
Sector weight = $\alpha_k$

Alternative 1: $\alpha_k = \frac{\text{trade}_{k,2010}}{\text{trade}_{w,2010}}$

Alternative 2: $\alpha_k = 1,$

Equal weight per sector
Sectorial weight for 2010

- Business Services: 29.46%
- Educational Services: 0.23%
- Communication Services: 9.39%
- Distribution Services: 0.23%
- Construction and Related Engineering Services: 2.16%
- Financial Services: 11.12%
- Health Related and Social Services: 0.23%
- Tourism and Travel Related Services: 25.37%
- Recreational, Cultural and Sporting Services: 0.23%
- Other Services Not Included Elsewhere: 0.18%
- Environmental Services: 0.18%
- Transport Services: 21.21%
PTA’s Exports Liberalization

$$PTA^x_{i,j,t} = \sum_{k=1}^{m} \alpha_k \cdot \gamma_c \cdot \varphi_{ij,k,t}$$

$$\varphi_{ij,k,t} = \text{Commitment liberalization score of country j with country i in sector k in year t}$$

$$\alpha_k = \text{sector k weight}$$

$$\gamma_c = \text{Country c horizontal commitments index}$$

PTA’s Imports Liberalization

$$PTA^m_{i,j,t} = \sum_{k=1}^{m} \alpha_k \cdot \gamma_c \cdot \theta_{ij,k,t}$$

$$\theta_{ij,k,t} = \text{Commitment liberalization score of country i with country j in sector k in year t}$$

$$\alpha_k = \text{sector k weight}$$

$$\gamma_c = \text{Country c horizontal commitments index}$$
\[ SL_{i,t}^x = \sum_{c=1}^{n} GATS_{c,t} \cdot \omega_{c,t} + \sum_{j=1}^{n} PTA_{i,j,t}^x \cdot \omega_{j,t} \]

Where,

\( GATS_{c,t} \) = GATS liberalization index for country c in year t

\( PTA_{i,j,t}^x \) = PTA liberalization index for country i exports to country j in year t

\( \omega_{j,t} \) = partner country weight
\[
SL_{i,t}^m = GATS_{i,t} \times (1 - \sum_{j=1}^{n} \omega_{j,t}) + \sum_{j=1}^{n} PTA_{i,j,t}^m \times \omega_{j,t}
\]

Where,

\(iGATS_{i,t}\) = GATS liberalization index for country i in year t

\(PTA_{i,j,t}^m\) = PTA liberalization index for country i imports from country j in year t

\(\omega_{j,t}\) = partner country weight
Country weight

In order to differentiate the relative impact of different trade partners, and thus obtain a better approximation of the effects of liberalization through the commitments made at both the GATS and PTAs.

\[ \omega_{i,t} = \frac{X_{i,t}^s}{X_{w,t}^s} \]

\[ \omega_{i,t} = \frac{X_{i,2010}^s}{X_{w,2010}^s} \]
Thanks