Measuring the International Supply of Services by GATS Modes

Beijing, China, 24 October 2011
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• Background and information needs ....What are the GATS modes of supply? And mode 4?

• Value: what can we expect in the (not too distant?) future?
  – Simplified allocation (with little resources)
  – Doing more: implementing data collection
  – Some country experiences

• Additional indicators to assess trade in services commitments
GATS: What do we need to measure?

Value of the international supply of services and additional indicators (in particular mode 4)

- By service product (or activity if not possible)
- By modes of supply
  - Mode 1: Cross-border trade
  - Mode 2: Consumption abroad
  - Mode 3: Commercial presence
  - Mode 4: Presence of natural persons
- By partner
- By relation between the parties

The GATS Modes of Supply (1/2)

**Mode 1: Cross-border**

- **COUNTRY A**
- **COUNTRY B**
- **BOP commercial services** (excl. travel, manufacturing serv., repairs and construction)
- The service crosses the border

**Mode 2: Consumption abroad**

- **COUNTRY A**
- **COUNTRY B**
- **Consumer**
- **Service supplier**
- The consumer is abroad

**Mode 3: Commercial presence**

- **COUNTRY A**
- **COUNTRY B**
- **FATS** + **BOP construction**
- **Establish commercial presence**
- **Controlled affiliate**
- **Company**
- $ $ $ $ Direct investment

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The Presence/Movement of Natural Persons in GATS

Relevant framework
• GATS’ main text: mode 4 → presence of natural persons
• GATS’ Annex → movement of natural persons

Description of Mode 4 in main text and annex

Purpose of stay
Fulfilling directly a service contract, whether as a service supplier (self-employed) or as an employee

Indirectly: Presence instrumental to supply of service: through commercial presence or supply at a later stage

Duration of stay
Temporary: Rules regarding citizenship, migration, residence and permanent employment are not covered

Mode 4 categories in statistical framework?

Contractual service suppliers
– Self-employed (independent) service suppliers
– Employees of foreign service suppliers
Intra-corporate transferees and persons directly recruited by the foreign affiliate

Areas of uncertainty
• difference between employment and service contract
• what does constitute a service?
• many commitments currently focus on highly-skilled workers
The size of mode 4 trade?

• Small compared to total trade, and to other modes of trade in services (*is the most restricted*)

• Importance varies across countries and sectors

• Mobility for skilled workers increasing and facilitated by special programs

• Both developed and developing countries are traders where mode 4 can be involved

The GATS Modes of Supply (2/2)

<table>
<thead>
<tr>
<th>COUNTRY A</th>
<th>COUNTRY B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mode 4: Presence of natural persons</strong></td>
<td></td>
</tr>
<tr>
<td><strong>BOP commercial services (excl. travel)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Consumer</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Mode 3 supply</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Controlled affiliate</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Intra-corporate transferee</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Temporarily!**

**A self-employed goes to country A**

**An employee is sent by a company of country B**

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International Supply of Services to United States: a first breakdown by modes

Mode 2: 10.2%
Mode 3: 22.6%
Mode 1 + 4: 66.7%


Remittances and compensation of employees are not measures of mode 4!

Labour mobility
- Compensation of employees
- Workers remittances
- BPM6: Personal transfers

Trade in services
- Services categories

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What is the problem with measuring GATS Modes of Supply?

Intermodal linkages

Services may be delivered through several modes of supply

Mode 1
Mode 2
Mode 3
Mode 4

A single service transaction through different modes

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  – Doing more: implementing data collection
  – Some country experiences
• Additional indicators to assess trade in services commitments
### Simplified allocation of FATS and EBOPS data to modes of supply (1/2)

<table>
<thead>
<tr>
<th>FATS (sales or output)</th>
<th>Balance of payments trade in services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode</td>
<td>Mode(s)</td>
</tr>
<tr>
<td>1</td>
<td>x</td>
</tr>
<tr>
<td>2</td>
<td>x</td>
</tr>
<tr>
<td>3</td>
<td>x</td>
</tr>
<tr>
<td>4</td>
<td>x</td>
</tr>
</tbody>
</table>

- **Transport**
  - Passenger: x
  - Freight: x
  - Mail and courier services: x
  - Other (Services provided by domestic carriers in foreign ports and vice-versa): x
  - Other: x

- **Travel**
  - Goods: x
  - Local transport services: x
  - Accommodation services: x
  - Food-serving services: x
  - Other: x

- **Construction**
  - Goods: x
  - Services: x

- **Insurance and pension services**
  - Goods: x
  - Services: x

- **Financial services**
  - Goods: x
  - Services: x

- **Charges for the use of intellectual property n.i.e.**
  - Goods: x
  - Services: x

* In territory where affiliate established. If not possible to breakdown by EBOPS 2010 product, by activity using ICFA Rev.1
** Certain degree of uncertainty regarding certain charges

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### Simplified allocation of FATS and EBOPS data to modes of supply (2/2)

<table>
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<th>FATS (sales or output)</th>
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<tr>
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<td>x</td>
</tr>
<tr>
<td>3</td>
<td>x</td>
</tr>
<tr>
<td>4</td>
<td>x</td>
</tr>
</tbody>
</table>

- **Telecom., computer, and information services**
  - Telecommunications services: x
  - Computer services: x
  - Information services: x

- **Other business services**
  - Research and development services: x
  - Professional and management consulting services: x
  - Technical, trade-related and other business services: x
  - Architectural, engineering, scientific, other services: x
  - Waste treatment, disposal, and recycling: x
  - Services incidental to agriculture, forestry and fishing: x
  - Services incidental to mining, and oil and gas extraction: x
  - Operational leasing: x
  - Trade-related services: x
  - Other business: x

- **Personal, cultural and recreational services**
  - Government goods and services n.i.e.: x
  - Commercial services purchased in host economies: x
  - Commercial services purchased in host economies: x
  - Personnel from home economy and dependants: x
  - Commercial services purchased in host economies: x

- **Distribution (wholesale, retail trade services)**
  - Goods: x
  - Services: x

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**Implementation based on existing data...**

**CHALLENGE**
International Supply of Services to United States: further breakdown by modes

- **Mode 2**: 10.2%
- **Mode 1**: 16.8%
- **Mode 3**: 66.7%
- **Mode 4**: 0.5%
- **Mode 1 + 4**: 5.7%
- **Mode 3+4**: 0.1%


Options to assess Mode 4 delivery in surveys

1. Did the service delivery involve physical presence of service provider?
   - Yes? Then, how was most of the service value provided (time/resources)?
     - Mostly by fax, email, etc.
     - Natural person at the end (e.g. to supervise)
     - The person's knowledge was essential to deliver the service

2. Require in services surveys allocation by each GATS mode of supply

3. Require estimated share of services inputs for Mode 4 services trade
## Indian International Supply of Computer Services, IT Enabled Services and BPO by Mode, 2008-09

<table>
<thead>
<tr>
<th>Size of transactions (million USD)</th>
<th>Mode 1</th>
<th>Mode 2</th>
<th>Mode 3</th>
<th>Mode 4</th>
<th>Total</th>
<th>Per cent Share in Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mode 1</td>
</tr>
<tr>
<td>&lt; 0.2</td>
<td>37</td>
<td>0</td>
<td>6</td>
<td>1</td>
<td>44</td>
<td>83.2</td>
</tr>
<tr>
<td>0.2-2.2</td>
<td>447</td>
<td>5</td>
<td>43</td>
<td>18</td>
<td>513</td>
<td>87.1</td>
</tr>
<tr>
<td>2-22</td>
<td>1930</td>
<td>0</td>
<td>225</td>
<td>111</td>
<td>2266</td>
<td>85.2</td>
</tr>
<tr>
<td>&gt; 22</td>
<td>22194</td>
<td>28</td>
<td>7051</td>
<td>11592</td>
<td>40865</td>
<td>54.3</td>
</tr>
<tr>
<td>Total</td>
<td>24607</td>
<td>32</td>
<td>7326</td>
<td>11723</td>
<td>43688</td>
<td>56.3</td>
</tr>
</tbody>
</table>

Source: Reserve Bank of India (2010), converted to US dollars by WTO.

## Australia's Legal Services International Supply by GATS Modes, 2008-09

**Example**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Amount (million USD)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode 1</td>
<td>347 million USD</td>
<td>69%</td>
</tr>
<tr>
<td>Mode 2</td>
<td>11 million USD</td>
<td>2%</td>
</tr>
<tr>
<td>Mode 3</td>
<td>75 million USD</td>
<td>15%</td>
</tr>
<tr>
<td>Mode 4</td>
<td>68 million USD</td>
<td>14%</td>
</tr>
</tbody>
</table>

Source: WTO calculations based on ILSAC Survey of Australian Export Market for Legal Services 2008-09
Estimating the international supply of services by mode: a long-term process?

1. Simplified allocation: MSITS 2010 table 5.2 as start guide for compilers for first estimation (have knowledge of services trade in their economy)

2. Further refine
   Anecdotal information, discuss with business associations, major players, users (hint: evaluating mode 4 is key)

3. Develop survey for specific (important) service
   Joint development? Use results to refine BOP? Collect additional data (e.g. details, quantitative information)?

4. Use BOP trade in services or business survey

Measuring the International Supply of Services by GATS Modes

- Background and information needs .... What are the GATS modes of supply? And mode 4?
- Value: what can we expect in the (not too distant?) future?
  - Simplified allocation (with little resources)
  - Doing more: implementing data collection
  - Some country experiences
- Additional indicators to assess trade in services commitments
Additional indicators to analyze the international supply of services

- Sectoral statistical frameworks: tourism, health, etc.
- Production, quantitative, employment indicators

- on Mode 3: FDI stocks, flows in services, number of foreign affiliates, employees, value of assets etc. (FATS)
- on Mode 4: Number (stocks and flows) of persons
  - Tourism and migration statistical frameworks for defining, with some amendments necessary
  - Possible sources:
    - Migration authorities or other administrative sources
    - Household, labour force, border/passenger surveys
    - Trade in services or more generally business surveys?

Need to clearly define “mode 4” questions/categories in existing data sources!

For which categories should we measure the number of mode 4 persons?

<table>
<thead>
<tr>
<th>Natural persons</th>
<th>Number of persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractual services suppliers</td>
<td></td>
</tr>
<tr>
<td>- Self-employed</td>
<td>Yes</td>
</tr>
<tr>
<td>- Employees of foreign service suppliers</td>
<td></td>
</tr>
<tr>
<td>Intra-corporate transferees and directly recruited by foreign affiliate</td>
<td></td>
</tr>
<tr>
<td>Services sellers - Persons responsible for setting up commercial presence</td>
<td>Yes (less important)</td>
</tr>
</tbody>
</table>
### Mode 4, migration, tourism statistics (1/2)

**Purpose of trip or migration**

<table>
<thead>
<tr>
<th>Length of stay of individuals</th>
<th>Less than 3 months</th>
<th>3 to 12 months</th>
<th>more than 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 2008 categories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visit/trip</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holiday, leisure and recreation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visiting friends and relatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education and training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health and medical care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious/faith-based</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transient entering eco/legal territory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business and professional</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(to employer-employee relationship with entity established in home economy)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractual service supply:</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- In self-employed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- In employed</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- In which Intra-corporate</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serv. sales/commercial price negotiation</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- serv. sales/commercial price, of serv. producer negotiation</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Commercial price, of goods producing company negotiation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other/real estate, non-corporate</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Mode 4, migration, tourism statistics (2/2)

**Purpose of trip or migration**

<table>
<thead>
<tr>
<th>Length of stay of individuals</th>
<th>Less than 3 months</th>
<th>3 to 12 months</th>
<th>more than 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment (migrant workers, employment-based settlement)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intra corporate transfer:</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- in services producing company</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directly recruited by a foreign established:</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- services producing company</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International civil servants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trainees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family reunification/formation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family based settlement, Ancestry based settlement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retiree settlement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurs and investors settlement</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a Humanitarian reasons (refugees, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Border workers; Frequent crossers; Nomads</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transit not entering economic/legal territory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diplomatic/consular personnel; Military pers.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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RECOMMENDATIONS OF MSITS 2010
To measure modes of supply

• FATS: Mode 3; BOP essentially to Modes 1,2, and 4 (except construction); BOP construction to modes 3 and 4;

• Each BOP service transaction to the dominant mode;

• Allocate services transactions to modes of supply according to EBOPS. If not possible allocate the 12 main BPM6 categories and the estimate of distribution services;

• Estimate distribution services;

• Other indicators for analysis, e.g.: Number of persons for mode 4 for all categories (migration/tourism statistics).