Survey on ICT-enabled Services
Exports

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Training for Pilot Survey
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OUTLINE OF PRESENTATION

• Background for the project
• Modes of supply
• Structure and content of the questionnaire
• Elements of methodology
• Possible output from the project
WHY IS IT IMPORTANT TO MEASURE SERVICES TRADE?

• International trade is a condition for economic growth
• International trade in services becoming of increasing importance:
  • due to the technological development of ICT allowing for digital trade
  • Increased importance of multinational enterprises ...
  • ... fragmenting their value chains globally
• General Agreement on Trade in Services (GATS) negotiations – framework for global services trade
• Policy and other decision makers are increasingly demanding information about services trade
• Services are increasingly traded, but the statistical system for classifying and capturing these international flows lags behind
SERVICES EXPORTS BECOMING OF INCREASING IMPORTANCE GLOBALLY ...

Source: UNCTADStat based on IMF Balance of Payments Statistics and UNCTAD, ITC and WTO data on trade in services.
... AND ALSO FOR INDIA

Share of Goods and Commercial Services in total Indian Trade (1980-2016)

Source: UNCTADStat based on IMF Balance of Payments Statistics and UNCTAD, ITC and WTO data on trade in services.
NEEDS FOR TRADE IN SERVICES STATISTICS

- Implementation of quantitative methodologies of impact assessment

- Specific needs in terms of:
  - Nature of the service
  - Mode of supply
  - Partner country
Need of statistics to:

- support negotiations
- monitor developments
- assess market access opportunities
- provide a firm basis for the settling of disputes

Major data problems and gaps:

- consistency and coverage
- partner country
- disaggregation
- modes of supply and, in particular, mode 3 and mode 4
- comparability across time
- Transparency (meta-data)
INTERNATIONAL STANDARDS

- MSITS 2010 has close links to other statistical frameworks and existing classifications

- Two main building blocks for describing the international supply of services:
  - Transactions between residents and non-residents (based on BPM6)
  - Supply of services through the operations of foreign affiliates based on foreign affiliates statistics (FATS)

- Relations of MSITS 2010 with BPM6 and SNA 2008
- Relations of EBOPS 2010 with CPC, Version 2 and ISIC Rev. 4
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• General Agreement on Trade in Services (GATS) negotiations – framework for global services trade
• Policy and other decision makers are increasingly demanding information about services trade
• Services are increasingly traded, but the statistical system for classifying and capturing these international flows lags behind
• The goal of this project is to test if the new survey can succeed in collecting data on international trade in ICT-enabled services
WHY IS ICT OF SPECIAL IMPORTANCE?

 ICTs are the main enabling factors

- Falling prices for voice and data communications
- Computerization of work and digitalization of output allow
- Service providers to segment and relocate work to large, remote pools of lower cost labor that can deliver high quality, timely services (ICT-enabled services)
- Services trade is evolving from basic call centers, software coding, and digital content to more complex business process such as system design and R&D
- ICT is a key component in the business model of multinationals. MNEs are a key driver for globalization
Outline of presentation

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MODES OF SUPPLY

➢ Several ways of performing international service transactions

➢ Various geographical configurations according to whether the provider or the customer moves or establishes in the country of the other or not

➢ Distinction of four modes of supply
  ➢ Cross-border supply, or Mode 1
  ➢ Consumption abroad, or Mode 2
  ➢ Commercial presence, or Mode 3
  ➢ Presence of natural persons, or Mode 4
MODES OF SUPPLY

- **Mode 1: Cross-border supply**
  - The service is supplied from the territory of one Member into the territory of any other Member

- **Mode 2: Consumption abroad**
  - The service is supplied in the territory of one Member to the service consumer of any other Member

- **Mode 3: Commercial presence**
  - Supply of a service by a service supplier of one Member, through commercial presence in the territory of any other Member

- **Mode 4: Presence of natural persons**
  - Supply of a service by a service supplier of one Member, through presence of natural persons of a Member in the territory of any other Member
CROSS BORDER SUPPLY (MODE 1)

Service delivered from company in India to a customer overseas

Example: An architecture firm in India provides plans and advice to clients in a foreign country through internet/phone/mail.

Source: WTO
CONSUMPTION ABROAD (MODE 2)

Service delivered to an overseas customer, temporarily in India

Example: A non-resident travels to India to receive legal advice from an Indian company.

Source: WTO
CROSS BORDER SUPPLY (MODE 3)

Commercial presence abroad of Indian owned company

Example: A company in India establishes a commercial presence (affiliate) abroad to supply services (e.g. supermarket or wholesaler)

Source: WTO
PRESENCE OF NATURAL PERSONS (MODE 4)

Example: An employee of an Indian IT firm is sent to Country X to deliver IT services.

Source: WTO
ESTIMATED IMPORTANCE OF THE DIFFERENT MODES OF SUPPLY USING THE SIMPLIFIED ALLOCATION

MODE 3 AND 1 OF MAIN IMPORTANCE

Figure 2: Share of services trade, by mode of supply

Source: WTO Secretariat.
U.S. SUPPLY OF SERVICES BY MODE
(Billions of U.S. dollars)

Data are exploratory and do not represent official statistics of the U.S. Bureau of Economic Analysis.

Source: US Bureau of Economic Analysis
EU-28 SUPPLY OF SERVICES, PARTNER EXTRA EU28, 2013: Modes are of Different Importance – Depending on the Type of Services

Source: Eurostat (2016).
## INDIAN EXPORTS OF SERVICES, RELATIVE IMPORTANCE BY SECTOR

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Services</td>
<td>138,528</td>
<td>145,525</td>
<td>149,164</td>
<td>157,196</td>
<td>156,278</td>
<td>161,845</td>
<td>100%</td>
</tr>
<tr>
<td>Goods-related services</td>
<td>-</td>
<td>134</td>
<td>255</td>
<td>383</td>
<td>324</td>
<td>265</td>
<td>0%</td>
</tr>
<tr>
<td>Transport</td>
<td>17,702</td>
<td>17,507</td>
<td>16,916</td>
<td>18,597</td>
<td>14,319</td>
<td>15,192</td>
<td>9%</td>
</tr>
<tr>
<td>Travel</td>
<td>17,708</td>
<td>17,972</td>
<td>18,397</td>
<td>19,700</td>
<td>21,013</td>
<td>22,428</td>
<td>14%</td>
</tr>
<tr>
<td>Other services</td>
<td>103,119</td>
<td>109,913</td>
<td>113,596</td>
<td>118,516</td>
<td>120,622</td>
<td>123,961</td>
<td>77%</td>
</tr>
<tr>
<td>Construction</td>
<td>838</td>
<td>922</td>
<td>1,219</td>
<td>1,613</td>
<td>1,483</td>
<td>2,078</td>
<td>1%</td>
</tr>
<tr>
<td>Insurance and pension services</td>
<td>2,584</td>
<td>2,258</td>
<td>2,144</td>
<td>2,281</td>
<td>1,985</td>
<td>2,145</td>
<td>1%</td>
</tr>
<tr>
<td>Financial services</td>
<td>6,249</td>
<td>5,352</td>
<td>6,376</td>
<td>5,645</td>
<td>5,344</td>
<td>5,083</td>
<td>3%</td>
</tr>
<tr>
<td>Charges for the use of intellectual property n.i.e.</td>
<td>303</td>
<td>321</td>
<td>446</td>
<td>659</td>
<td>467</td>
<td>529</td>
<td>0%</td>
</tr>
<tr>
<td>Telecommunications, computer, and information services</td>
<td>47,113</td>
<td>48,801</td>
<td>53,805</td>
<td>54,535</td>
<td>55,046</td>
<td>55,318</td>
<td>34%</td>
</tr>
<tr>
<td>Other business services</td>
<td>38,549</td>
<td>47,091</td>
<td>46,651</td>
<td>48,461</td>
<td>50,097</td>
<td>53,202</td>
<td>33%</td>
</tr>
<tr>
<td>Personal, cultural, and recreational services</td>
<td>345</td>
<td>767</td>
<td>1,232</td>
<td>1,266</td>
<td>1,266</td>
<td>1,397</td>
<td>1%</td>
</tr>
<tr>
<td>Government goods and services n.i.e.</td>
<td>593</td>
<td>495</td>
<td>461</td>
<td>582</td>
<td>561</td>
<td>595</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: UNCTADStat based on UNCTAD, ITC and WTO data on trade in services.
SOFTWARE EXPORTS FROM INDIA BY MODE: MODE 1 OF INCREASING IMPORTANCE

<table>
<thead>
<tr>
<th></th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software Exports by Different Modes</td>
<td>percent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mode 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross-border supply</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>56.3</td>
<td>64.6</td>
<td>67.4</td>
<td>69.0</td>
<td>74.7</td>
</tr>
<tr>
<td>Mode 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption abroad</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.1</td>
<td>0.0</td>
<td>0.1</td>
<td>0.5</td>
<td>1.6</td>
</tr>
<tr>
<td>Mode 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial presence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16.8</td>
<td>17.6</td>
<td>14.8</td>
<td>15.4</td>
<td>9.4</td>
</tr>
<tr>
<td>Mode 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presence of natural persons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>26.8</td>
<td>17.8</td>
<td>17.7</td>
<td>15.1</td>
<td>14.3</td>
</tr>
</tbody>
</table>

Source: Reserve Bank of India (2016).
THIS PROJECT FOCUSES ON EXPORTS OF ICT-ENABLED SERVICES
(UNCTAD ICT4D Technical Note no. 3)

- ICT-Enabled Services definition used: *services with outputs that can be delivered remotely over ICT networks (UNSC approved)*

- Builds on existing measurement frameworks, current definitions, international classifications (EBOPS 2010) and data collection (balance of payments)
POTENTIALLY ICT- ENABLED SERVICES

1) Telecommunications (including Internet services)
2) Computer services (including computer software)
3) Sales and marketing services
4) Information services (including health services)
5) Insurance and financial services
6) Management, administration and back office services (including call centres)
7) Licensing services
8) Engineering, related technical services and R&D
9) Education and training services
IDENTIFYING ICT-ENABLED SERVICES

- Based on CPC (109 codes) corresponding to 40 EBOPS codes

Categories for measuring trade in ICT-enabled services

| 1.1 ICT services – Telecommunications               |
| 1.2 ICT services – Computer services (including computer software) |
| 1.3 Sales and marketing services, not inc. trade and leasing services |
| 1.4 Information services                            |
| 1.5 Insurance and financial services               |
| 1.6 Management, administration, and back office services |
| 1.7 Licensing services                              |
| 1.8 Engineering, related technical services, research and development (R&D) |
| 1.9 Education and training services                |

Source: UNCTAD ICT4D Technical Note no. 3
WHY IS THIS PROJECT IMPORTANT?

The project tests the feasibility of a new and innovative approach to measuring exports of services by identifying ICT enabled services.

Not only the statistical results – but also your experiences in collecting the information is of crucial importance.

The international statistical community is awaiting the results from your survey with huge interest as this might be an important step forward to have better and more informative statistics on international trade in services.
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STRUCTURE OF THE UNCTAD MODEL QUESTIONNAIRE

1. Information about the enterprise (11 questions)
2. Information about the potential services exports from the enterprise (1 filter question)
3. Detailed information about ICT enabled services (3 questions (*9))
4. National questions?
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POSSIBLE OUTPUT FROM THE PROJECT

What did Statistics New Zealand learn?

• Respondent education and guides are important
• Respondents found the concept easier to understand than Statistics NZ thought
• Less respondent burden than anticipated
• Questionnaire layout is important for detailed information – web questionnaires would be best
MODE OF SUPPLY BY SERVICE TYPE FROM NEW ZEALAND

Source: Statistics New Zealand.
EXAMPLES OF TABULAR OUTPUT

1) No. of enterprises exporting services by mode (Total and broken down by industrial activity, size and nationality of ownership)

2) Total Services exports by mode 1 (broken down by industrial activity, size and nationality of ownership)

3) Total Exports of ICT enabled services broken down by type of services (Total broken down by industrial activity, size and nationality of ownership (domestic/foreign control))

4) Intensity: Share of ICT enabled services of total mode 1/total services exports (total and by type of service, by size class or ownership)
POSSIBLE OUTPUT FROM PILOT SURVEY (2): U.S. SUPPLY OF SERVICES BY MODE 1
(Billions of U.S. dollars)

Data are exploratory and do not represent official statistics of the U.S. Bureau of Economic Analysis

Source: US Bureau of Economic Analysis
POSSIBLE OUTPUT FROM PILOT SURVEY (2): Exports of Potentially ICT-Enabled Services for the Top Ten Countries, 2015

<table>
<thead>
<tr>
<th>Rank</th>
<th>Exports</th>
<th>Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level ($ millions)</td>
<td>% All services trade</td>
</tr>
<tr>
<td>All Countries</td>
<td>398,669</td>
<td>53%</td>
</tr>
<tr>
<td>1</td>
<td>United Kingdom(^1)</td>
<td>42,008</td>
</tr>
<tr>
<td>2</td>
<td>Ireland(^1)</td>
<td>39,204</td>
</tr>
<tr>
<td>3</td>
<td>UK Islands, Caribbean(^1)</td>
<td>36,295</td>
</tr>
<tr>
<td>4</td>
<td>Canada</td>
<td>27,130</td>
</tr>
<tr>
<td>5</td>
<td>Switzerland(^1)</td>
<td>24,922</td>
</tr>
<tr>
<td>6</td>
<td>Japan</td>
<td>21,103</td>
</tr>
<tr>
<td>7</td>
<td>Germany</td>
<td>16,310</td>
</tr>
<tr>
<td>8</td>
<td>China</td>
<td>12,774</td>
</tr>
<tr>
<td>9</td>
<td>Brazil</td>
<td>11,526</td>
</tr>
<tr>
<td>10</td>
<td>Netherlands</td>
<td>11,493</td>
</tr>
</tbody>
</table>

\(^1\) Values for 2015 are calculated lower bounds.

Source: US Bureau of Economic Analysis
CONCLUDING REMARKS (US BEA)

• Trade in ICT and potentially ICT-enabled services offer insight into the extent to which ICT may be used to facilitate trade in services
• Trade in ICT and potentially ICT-enabled services have grown faster than total services, possibly reflecting improved ICT technology
• Popular concern about offshoring of ICT-enabled services
• These data could potentially be used to examine:
  • How improvements in ICT networks have impacted trade between the U.S. and its trading partners
  • How ICT networks support global value chains for U.S. multinationals
  • How policies that affect how data are shared and stored could impact trade in services to/from the United States
FOR EASY REFERENCE: STUDIES QUOTED

• Manual on Statistics of International Trade in Services 2010 (MSITS 2010)

• Census of International Trade in Services and Royalties: year ended June 2011, Statistics New Zealand,

• UNCTAD ICT4D technical note 3, Oct 2015


• Trends in U.S. Trade in ICT Services and in ICT-Enabled Services, Alexis N. Grimm, US Bureau of Economic Analysis, May 2016

• Trade in Services by GATS Modes of Supply: Statistics Concepts and First EU Estimates, L. Cernat et al., Eurostat, Nov 2016
THANK YOU FOR YOUR ATTENTION ANY QUESTIONS?