# Workshop on Trade in Services and Digital Economy Statistics for Mongolia

Ulaanbaatar 20-23 March 2023

#### **Session 7**

Measuring services transactions between residents and non-residents: concepts and international recommendations

**Thierry Coulet** 

# Introduction

- This presentation describes in detail the measurement of international trade in services in the conventional BOP meaning of transactions between R and NR of an economy.
- It sets out in a first part the conceptual background and principles underlying the recording of such trade.
- It then describes the Extended Balance of Payments Services classification (EBOPS 2010) and the content of the 12 main components.
- It concludes with some recommendations.

#### Content

- Conceptual background
- 2. EBOPS 2010 components
- 3. Conclusions and recommendations

# 1. Conceptual background

## Residence

- The BOP records transactions between R and NR.
- The residence of each institutional unit is defined as "the
  economic territory with which it has the strongest connection,
  expressed as its predominant center of economic interest".
- There is a center of economic interest when there exists some location (dwelling, place of production) from which a unit engages in economic activities and transactions over a lengthy period and on a significant scale.
- In practice the one year and more rule is used as an operational definition (common rule to BOP and NA).

# Residence of an household

- A household has a center of economic interest in an economy when members maintain a dwelling as their principal residence
  - If a household stays in one economy for more than one year it is considered as resident of that economy.
  - Exception to the one year rule are students and medical patients staying abroad.
  - Seasonal workers and border workers are considered as NR in the economy where they work.
  - Foreign officials, diplomats, members of foreign army: NR of the economy where they are staying.
  - Idem for employees of international organisations.

# Residence of an enterprise

- An enterprise (corporation or quasi-corporation) has a centre of economic interest in one economy when it is engaged in a significant amount of production of goods and / or services.
  - A significant amount of production means that it maintains at least one production establishment in the economy over a long period of time (more than one year).
  - The enterprise may be a local enterprise or a FDI enterprise (including branches).
  - These include representative offices or agents.

## Residence of the Government

- « General Government includes operations outside the home territory: embassies, consulates, military bases and other enclaves of foreign governments including those providing training and other forms of assistance ».
  - To be considered as extensions of the home government territory and classified as non-residents in the compiling economy.
  - Same treatment for international organisations.

## Valuation of transactions

- Market price should be the basis for valuation of all transactions in the BOP.
  - It is the actual price of a given service transaction agreed mutually by the supplier and the consumer, who are independent of each other.
  - Affiliates are not independent entities: the book or transfer price between affiliates may not be equivalent to market prices and could be motivated by the optimum allocation of profit among units.
  - Replacement of book value by market value: no precise recommendation in the Manual on how to correct the distortion on valuation.

# Time of recording

- Services transactions need to be recorded when rendered i.e., delivered or received (accrual accounting); these dates generally correspond to the dates on which the services are produced.
- This may differ from the time of payment (cash accounting)
  which may occur before (pre-payment) / after (trade credit)
  service is rendered.
- For many services, cash basis and accrual accounting are equivalent.
  - However this is not the case for services with prepayments or post-payments like freight, insurance or construction.

# Statistics by trading partner

- Need for a detailed geographical allocation of the services transactions, according to the residence of trading partners
  - Key to negotiations carried out under the GATS or other regional organisations,
  - Key to the definition of an informed economic policy,
  - Implementing mirror exercises to improve data quality.
- Statistics to be compiled on an individual trading partner basis
  - At least for the 12 major components and main trading partners,
  - And later on for all EBOPS 2010 components.

# 2. EBOPS components

# BPM6 services components

- Manufacturing services on physical inputs owned by others
- Maintenance and repair services n.i.e
- Transport
- Travel
- Construction
- Insurance and pension services
- Financial services
- Charges for the use of intellectual property n.i.e
- Telecommunications, computer and information services
- Other business services
- Personal, cultural and recreational services
- Government goods and services n.i.e

# Manufacturing services

- "Manufacturing services on physical inputs owned by others":
  - New service item including activities such as processing (oil refining, liquefaction of gas...), assembly of electronic components, clothing and packing,
  - Undertaken by enterprises who do not own the goods and which are paid a fee by the owner.
- Transactions previously recorded with goods on a gross basis.
  - This change of recording corresponds to a stricter application of the "change of ownership principle" which applies to BOP and national accounts goods recording.

# Maintenance and repair

- Covers maintenance and repair work undertaken by residents on goods owned by NR and vice versa: both minor (maintenance) and major repairs are included.
- Includes repairs on ships, aircrafts and other transport equipment.
- Excludes construction repair and maintenance (construction), maintenance and repair of computers (computer services).
- The value to be recorded in the services account is the value of repair work done on the goods (including materials supplied by repairer).

# Transportation services

#### 3. Transportation

- 3.1Sea Transport
  - Passengers
  - Freight
  - Other (auxiliary transport services)

#### 3.2 Air transport

- Passengers
- Freight
- Other (auxiliary transport services)

#### 3.3 Other modes

(Space, rail, road, inland waterways, pipelines)

3.4 Postal and courier services (new)

# Transportation services

- Covers all transportation services performed by residents of one economy for those of another.
- Includes:
  - The carriage of passengers (passenger)
  - The carriage of goods (freight)
  - The rental of carrier with crew
  - « Supporting and auxiliary services » such as cargo handling, navigation fees, maintenance and cleaning of carriers.
- Are Excluded passenger services provided to non-residents by residents carriers within resident economies, recorded under « travel ».

# Transportation services

The measurement of freight transport is affected by the following conventions:

- BPM6 and MSITS recommend that goods be valued FOB at the customs frontier of the exporting economy,
  - Including transportation services performed prior to arrival of the goods at the customs frontier of the exporting economy.
- Freight charges are considered to be borne by the importing economy.
  - Cover transportation to the customs frontier of the importing economy, and within that economy to the point of delivery.
  - These services are treated as services performed (by R or NR) for the residents of the importing economy.

# Travel services

- In the EBOPS, travel services are classified as:
  - Business travel (seasonal and border workers, carrier crews, employees travelling on behalf of their employing enterprise...).
  - Personal travel (health-related, education-related, other, persons going abroad for holidays, recreational and cultural activities).
- A supplementary presentation of travel services by product is recommended: would allow a more appropriate analysis from a GATS perspective and closer links with tourism statistics.
  - Goods
  - **Services**: local transport, accommodation services, food-serving services, others.

## Construction

#### 5. Construction

- 5.1 Construction abroad
- 5.2 Construction in the compiling economy
- Construction services cover work on construction projects in the form of buildings and other construction such as roads, bridges and dams; it also includes assembly and installation work.
- Construction services relate to projects in locations outside the territory of construction enterprises.

## Construction

- Construction is recorded on a gross basis, including all goods and services used as inputs to the works, other costs of production, and the operating surplus.
- An explicit breakdown should be made between:
  - Construction abroad: that is construction works for NR by R enterprises,
  - Construction in the compiling economy: that is construction works for R by NR enterprises.
- In case the construction duration takes more than one year, it
  has to be considered as a foreign direct investment and not as
  a service.

# Insurance and pension services

#### 6. Insurance and pension services

- 6.1 Direct insurance
- 6.2 Reinsurance
- 6.3 Auxiliary insurance services
- 6.4 Pension and standardized guarantee services
- This item covers the provision of various types of insurance to non-residents by resident companies and vice-versa.
- Further breakdown of direct insurance between life insurance, freight insurance and other direct insurance (complementary item).

# Insurance and pension services

- A direct insurance transaction occurs between an insurance company and the public.
- Reinsurance involves two insurance companies and allows insurance risk to be transferred from one insurer to another in the event of a large number of claims or major catastrophes (earthquakes, typhoons...).
- The transactions undertaken by insurers include charging premiums, paying claims and investing funds.
- Direct insurance and reinsurance services are estimated by the services charges included in the total premiums.

## Financial services

#### 7. Financial services

- 7.1 Explicitly charged services, e.g. fees for bank account management
- 7.2 Financial intermediation services indirectly measured (FISIM)
- They cover financial intermediation and auxiliary services provided by banks and other financial intermediaries and auxiliaries
  - Relate to transactions in financial instruments, deposit taking and lending, credit card services, financial advisory services, financial asset management...

## Financial services

- They may be charged for by explicit charges, or by margins between the interest rate and the reference rate on cross-border loans and deposits (hidden charges or FISIM).
  - Explicit charges are levied in the case of many financial services and require no specific calculation or estimation: compiled using the standard BOP collection system.
  - But interest margins are an alternative to charging customers explicitly for financial services. It is considered that interest rate includes both an income element and a charge for a service (FISIM).

# Financial services (FISIM)

- FISIM represents an indirect charge applied to loans and deposits
  - For those to whom banks lend, FISIM is the difference between the interest charged on loans and a reference rate which would not contain any service element
  - For those from whom banks borrow, it is the difference between a reference rate and the interest earned by the depositor.

# 8. Charges for the use of intellectual property n.i.e

- Previously "Royalties and Licence fees".
- Some similar charges are to be included elsewhere under EBOPS 2010:
  - All sales of ownership rights (under the appropriate service headine), e.g. copyrights on a computer software.
  - Customised software or audio-visual products (computer or audio-visual services).
  - Non-customised software provided on physical media (goods).

# Charges for the use of intellectual property n.i.e

#### Included here are :

- Charges for the use of proprietary rights, such as patents, trademarks, copyrights, industrial processes.
- Franchise and trademark licensing fees.
- Charges for licenses to reproduce and/or distribute intellectual property embodied in produced originals or prototypes, such as copyrights on books and manuscripts, computer software, cinematographic works and sound recordings.
- Licenses for the use of outcomes of research and development.

# Telecommunications, computer and information services

# 9. Telecommunications, computer and information services

- 9.1 Telecommunication services
- 9.2 Computer services
- 9.3 Information services
- Telecommunications cover the broadcast or transmission of sound, images, data or other information by phone, radio, television, mail...
  - Includes mobile telecommunications services, internet backbone services and online access services.
  - Does not include the value of information transported through these media (recorded under the appropriate item).

# Telecommunications, computer and information services

**Computer services** consists of hardware and software related services and data processing services.

- As for software related services, they include:
  - (1) Sales of customized software and related licences to use, (2) development, production, supply and documentation of customized software made to order for specific users, (3) non-customized software downloaded whether with a periodic license fee or a single payment, (4) licences to use non-customized software provided on a storage device with a periodic licence fee, (5) sales and purchases of originals and ownership rights for software systems and applications.

NB: They exclude non-customized software on storage devices with licenses conveying perpetual use (merchandise).

# Telecommunications, computer and information services

- Other computer services include:
  - (1) Hardware and software consultancy and implementation services, (2) maintenance and repairs of computers, (3) data recovery services, (3) analysis, design and programming of systems ready to use, (4) data processing, (5) web page hosting services...
- **Information services** is divided into (1) news agency services and (2) other information services (including databases services and web search portals like Google).

## Other business services

- No longer includes "merchanting services", now recorded with merchandise trade.
- Otherwise same coverage as MSITS2002
- Three new main headings:

#### **10.1 Research and Development**

Covers those services that are associated with basic research, applied research, and experimental development of new products: (1) physical and social science, (2) commercial research in electronics pharmaceutical and biotechnologies, (3) humanities.

NB: the amounts payable for use of proprietary rights arising from R&D are included under « charges for the use of intellectual property »

# Other business services

# 10.2 Professional and management consulting services

- Legal services
- Accounting, auditing, bookkeeping and tax consulting
- •Business and management consulting and public relations
- Advertising, market research and public opinion polling

- 10.3 Technical, trade related and other business services
- •Architectural, engineering, scientific and other technical services
- •Waste treatment and de-pollution, agricultural and mining services
- Operational leasing
- •Trade-related services (commissions on goods and services transactions payable to merchants, commodity brokers...)
- •Other business services (distribution services, real estate...)

# Personal, cultural and recreational services

#### 11. Personal, cultural and recreational services

- 11.1 Audiovisual and related services
- 11.2 Other personal, cultural and recreational services

#### Audiovisual and related services

- Cover production of movies, musical recordings, radio and television as well as artistic related services.
- Included: mass-produced audiovisual products purchased and delivered electronically, similar products obtained through a license to use, services provided by performing artists (actors, musicians...) or authors.

# Personal, cultural and recreational services

- Other personal, cultural and recreational service is divided into health services, education services, heritage and recreational services, other.
  - **Health services** are supplied by hospitals, doctors, nurses and paramedical as well as laboratories whether rendered remotely (telemedicine: mode 1) or on-site (mode 4).
  - Education services comprises all level of education delivered through correspondence courses, via internet or television (mode 1) or via teachers supplying services directly in host economies (mode 4).
  - Heritage and recreational services includes services associated with museums and other cultural, sporting, gambling and recreational activities.

# Government goods and services n.i.e.

#### 12. Government goods and services n.i.e.

- 12.1 Embassies and consulates
- 12.2 Military units and agencies
- 12.3 Other government goods and services n.i.e.
- A breakdown based on the transactor (the government unit):
- Services supplied by and to Governments should be classified to the relevant category (business services, health...) when feasible.
- Reminder: government and international organisations enclaves are not residents of the territory where they are located.
  - Transactions with residents of the territory where they are located are international transactions.
  - Transactions with their home economies are transactions between residents

# Government goods and services n.i.e.

- Exports of government goods and services include the supply of services to embassies, consulates, military units of foreign Governments located in the compiling economy.
- Imports of government goods and services include acquisition of services by the embassies of the Government of the compiling economy in other territories.
- Includes expenditures by diplomats, military personnel... in the economy where they are located but exclude expenditures of locally engaged staff (resident to resident).

# Conclusions and recommendations

## Recommendations of the Manual

- The compilation of services transactions between residents and non-residents should be done according to internationally agreed standards (residence, valuation, time of recording...).
- Data on services transactions between residents and nonresidents should be compiled according to EBOPS 2010 with a priority for BPM6 (12) components.

# Recommendations of the Manual

- Statistics by origin (country of the service provider) and destination (country of the consumer) are needed for analytical and policy purposes and for use in bilateral and multilateral negotiations (breakdown at least for the 12 main components).
- Data for at least total services transactions should be compiled separately for transactions with related and unrelated parties (useful for FATS statistics).
- Allocation of the transactions between residents and nonresidents over the GATS modes of supply (by dominant modes or by the most significant modes of supply).

# Thank You