Main Challenges in Measuring Global Production

Tülay KORKMAZ

Turkish Statistical Institute

April 9, 2019 | Meeting of the Group of Experts on National Accounts, Special Session for EECCA, SEE and other interested countries (9 April)
1. Challenges for statisticians and analysts; Difficulties in Globalization

2. Recent developments in statistical system of Turkey

3. Some aspects of global production in Turkey
   - Enterprise Groups in Turkish Business Registers
   - International Trade in Services Statistics (ITSS)
   - FATS
   - Foreign Direct Investment

4. Future Plan
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Challenges for statisticians and analysts; Difficulties in Globalization

- Concept
  How to solve the problems of interpretability for standard macro indicators

- Data
  How to get relevant information on global events; how to ensure consistent and exhaustive recording of the worldwide production process of MNEs across countries

- Analysis
  How to understand globalization itself and implications for flow of funds, interconnectedness,

- Confidentiality
  Data sharing;
  - Between institutions in Country
  - Between country
Challenges for statisticians and analysts; The data sources

What needs to be improved and what could be done at the national and international level.

1. Identify Existing Data Sources
   - Financial / Regulatory Data
   - Other Administrative Data
   - Existing Survey Data
   - Macroeconomic Statistics

2. Identify Data Produced
   - Data produced by compiling agency
   - Data produced by government agencies,
     - Sector coverage
     - Classification

3. Data Sharing Arrangements
   - Data sharing protocols between agencies
   - International issues
Challenges for statisticians and analysts; Link btw Macroeconomic Statistics

Accounting restrictions in BoP are a subset of accounting restrictions in sector accounts

- Trade statistics
- Transaction reporting systems
- Surveys
- Official data
- International organisations
- Micro data

Sources for BoP are a subset of sources for NA (GDP, sector accounts)

(input from the Workshop on the Use of Financial Accounts, İstanbul, Celestino Girón)
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Recent developments in statistical system of Turkey

Administrative Data (Micro Data)
- MoTF
- RE
- SSI
- BRST
- MoI

Business Register
- Framework
- Sector classification
- Activity classification

Improvements
- SBS
- Short Term Business Indicators
- Improvement in quality and timeliness while reducing the response burden in data collection process

Improvement in National Accounts
- Coherence between annual, short-term, national accounts indicators
Recent developments in statistical system of Turkey

MoF Transactions Daily WebService

MoFTable 1
MoFTable 2
MoFTable 3

MoFTable ..

BR Local Unit Table
BR Legal Unit Table
BR Enterprise Unit Table

Activity code
Teams in the Regional Offices

BR FRAME (DAILY)

Institutional Sector Classification
(NA, FA and GFS)
CBRT & MoTF

Updates from other sources
Recent developments in statistical system of Turkey

Completed Studies within the Framework of Major Revision in NA

- 2012 Supply/Use and Input/Output Tables
- Independent Annual GDP Estimates
- Quarterly GDP Estimates
- Gross Domestic Product (GDP) by Income Approach
- Regional Accounts
- Institutional Sector Accounts (ISA)
- EDP Notification Tables
Fields of Cooperation

Single classification of institutional units, sectors and instruments, data quality issues. Working Groups;

- Integration of National Accounts and BOP
- Financial Accounts Working Group
- GFS Working Group by MoTF and CBRT
- Integration of Non Financial and Financial Sector Accounts
- International Trade Services (ITS) Project
Challenges for statisticians and analysts; Difficulties in Globalization

Developments in Statistical System of Turkey

Some aspects of global production in Turkey
- Turkish Business Registers - Enterprise Groups
- International Trade in Services Statistics (ITSS)
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Future Plan
- Cross-border phenomena and in particular when it comes to delineating the statistical units to be stored in the national statistical business registers.

- It brings a better understanding of the economic reality of the multinational groups and consequently improves the quality of the national business registers and national statistics.
3. Some aspects of global production in Turkey – Enterprise Groups in Turkish Business Registers

Restructuring of an MNE with sizeable effects on national statistics

Separate financial analysis of MNEs

Behavior of MNE’s

- The framework of MNE’s
- How much they invest
- How much they allocate
- How much they pay tax
- What is the role of MNE’s in financial system
- Capacity of FDI of MNE’s
- Global data base for MNE
Some aspects of global production in Turkey – Enterprise Groups in Turkish Business Registers

**Aim of enterprise group registers**
- to get basic figures and variables on EGs units
- to delineate the pictures of EGs in terms of control and share relationship within the legal units belonging to that group,
- to gain information on the legal units and their links to enterprises and enterprise groups

**Problems encountered**
- Lack of administrative sources
- No updated data in the available sources
- Not possible to detect the whole scope of the EGs
- Additional burden for profiling of MNEs

**Future plans**
- to initiate profiling studies
- to complete the scope of EGs
- to continue the negotiations with other administrative bodies
- Coopetion with Eurostat in EGR
- Integrating framework for all related statistics in different Institute
### Data Sources

<table>
<thead>
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<th>Source</th>
<th>Description</th>
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<tr>
<td>Turkstat- SBS survey-Foreign Controlled Enterprise Statistics</td>
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<td>Turkstat-Outwards FATS</td>
<td>Association of International Investors Data</td>
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<td>Revenue Administration</td>
<td>Ministry of Science, Industry and Technology – Foreign Capital Companies</td>
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<td>Ministry of Trade– Foreign direct investments activated in Turkey</td>
<td>Turkish Union of Chambers and Commodity Exchanges – Foreign Capital Companies</td>
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<td>Ministry of Treasury and Finance – Turkish companies that have foreign direct investments abroad</td>
<td>EGs of previous year</td>
</tr>
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</table>
Some aspects of global production in Turkey – International Trade in Services Statistics (ITSS)

**Institutional Framework**
- ITSS have been compiled and announced by CBRT within the BOP Statistics
- TurkStat started to conduct pilot ITSS survey

**Data Sources**
- Administrative records used for framework and analysis
- VAT declarations
- Export of goods, etc

**Why ITSS survey?**
- Insufficient details in the bank reports (ITRS system)
- To expand its scope by including important sub-sectors for our country
- Need of data on modes of supply

**Future plans**
- Quarterly ITSS
- Comparative analysis in terms of coverage and value is made on the BOP
3 Some aspects of global production in Turkey – FATS-Foreign Controlled Enterprises

- **OFATS**
  - **Framework:**
    - Annual Industry and Service Statistics, MoT, CBRT, The Turkish Contractors Association, Previous year OFATS application, Financial Intermediary Inst.,
    - EG Survey data.

- **IFATS**
  - **Framework:**
    - Administrative registers (RE) covering all sections from B to S of NACE Rev.2 and regardless of size group of enterprises

**Future Plan**
To determine affiliates more accurately:
- There is a need to analyze the capital and shareholding structure of the resident enterprise groups in Turkey.
Some aspects of global production in Turkey – Goods for Processing in Turkey

Goods for processing are included in ITGS and their processing fees are calculated and recorded separately.

- Declarations related to goods for processing are sent to TurkStat separately by Customs
- Separately recorded for BOP and National Accounts
- Processing fee is calculated and sent to the CBRT (by using invoice value-statistical value and type of payment)
- Nature of transaction codes used for GfP

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<td>Operations following processing under contract</td>
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Some aspects of global production in Turkey – Foreign Direct Investment

Institutional framework – division of labor

- Compilation
  - Transactions (flows), by Central Bank
  - Liability position
  - Asset position, by Ministry of Treasury & Finance

- Statistics are disseminated by the Central Bank as part of the BOP and IIP statistics
Some aspects of global production in Turkey – Foreign Direct Investment

Flows / Assets

Consist of:

- **Equity capital** (including reinvested earnings)
- **Debt instruments** cover loans extended by
  - Parent companies in Turkey to their non-resident direct investment enterprises,
  - Branches, affiliates and subsidiaries in Turkey to their non-resident parent companies,
  - Direct investment enterprises in Turkey to fellow enterprises abroad,

The data source is “Monthly Foreign Exchange Position Reports”, in which FDI transactions are reported by banks based on the declarations of the resident enterprises.
Some aspects of global production in Turkey – Foreign Direct Investment

**Flows / Liabilities**

- **Equity capital** (including reinvested earnings)
  
  The data sources are:
  
  - “Monthly Foreign Exchange Position” reports, reported by banks based on the declarations of the resident enterprises.
  - Inward Direct Investment Survey (for Reinvested earnings)

- **Real Estate**
  
  The data sources are:
  
  - The records of the General Directorate of Land Registry and Cadaster for the figures on traded real estates with a country breakdown. (The unit prices are estimated from “Departing Visitors Survey” conducted by Turkish Statistical Institute)

- **Debt Instruments** cover loans extended by
  
  - Non-resident parent companies to their direct investment enterprises in Turkey
  - Non-resident branches, affiliates and subsidiaries to their parent companies in Turkey
  - Fellow enterprises abroad to direct investment enterprises in Turkey

  The data source is
  
  “Private Sector’s External Debt Monitoring System” established in the CBRT.
Some aspects of global production in Turkey – Foreign Direct Investment

**Stocks / Assets**

Outward direct investment statistics is the responsibility of the Ministry of Trade (Beginning with 2015)

Compilation method: Enterprise Survey

By this survey,

- Equity capital,
- Reinvested earnings,
- Claims/liabilities between resident direct investors and direct investment enterprises

were compiled.
Some aspects of global production in Turkey – Foreign Direct Investment

Stocks / Liabilities

Inward direct investment position is the responsibility of the CBRT (Beginning with 2000)

Compilation method: Enterprise Survey. The population of resident direct investment enterprises is generated by using:

- “Foreign Owned Enterprises” registrar of the Ministry of Trade,
- “Turkey's First 500 Industrial Enterprises” and “Turkey’s Second 500 Industrial Enterprises” list published by the Istanbul Chamber of Industry (ICI),

The sample is selected in two stages.

• At Stage 1: (The large-scale direct investment enterprises operating in Turkey)
  – All enterprises responded to the previous year’s survey are included.
  – Enterprises in the lists of Istanbul Chamber of Industry and the Ministry of Trade, with equity capital equal or more than 5 million Turkish Liras (TL) are also included.

• At Stage 2: (Medium and small-scale direct investment enterprises operating in Turkey)
  – The rest of the population is grouped into four strata with respect to their equity capital
  – Within each stratum, the enterprises are selected randomly.
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In Short term

Close cooperation with the primary statistics compilers will be developed (BoP, MFS, SEC, etc.) and NSIs/NCB with Eurostat/ECB

- National implementation strategies and detailed programmes for Globalization should be developed with support of EUROSTAT (by projects) and ECB

  Consultation with the main stakeholders for globalization
  - Revenue Administration,
  - Central Bank,
  - Ministry of Treasury and Finance,
  - Ministry of Trade
  - Social Security Institution
  - ...

- Adaptation of classification frameworks, business registers and frames, surveys, administrative data sources and information technology infrastructure
In Long Term

Data collection and compilation strategies should be adapted to measure global entities that are engaged in production that is not limited by National boundaries (MNE, FGP, IPP etc).

- Working with other countries
- Working with other organizations
Thank you ....