Experience in improving the measurement of global production arrangements

Alicja Truszyńska, Statistics Poland

09.04.2019 Geneva
Actions undertaken within the grant agreement

TITLE OF THE ACTION:

Integrated global accounts and global production

TITLE OF THE REPORTED PROJECT:

WP2: Global production
WP4: Knowledge sharing about impact of globalisation on NA

ELIGIBLE PERIOD OF THE REPORTED PROJECT:

01.06.2017 - 30.11.2018
The main goal of the action

The main goal of the project is to initiate activities in the Polish official statistics aimed at capturing the impact of globalisation on NA and BoP.

In particular:
- identification of existing gaps in data sources,
- obtaining more details on units engaged in merchanting and goods for processing,
- identification of Factoryless Goods Producers.

Key point - close cooperation with different statistical domains.
The scope of works carried out within the project


2. Identification of entities engaged in the global arrangements

3. Conducting a pilot survey

4. Analysis of the pilot survey results and their comparison with data available in official statistics

5. Impact of the global arrangements on NA – case studies.

6. Developing proposals for modifications of statistical surveys or methods for adjusting the results of the surveys to the NA i BoP needs.
Analysis of recommendations in UNECE GUIDE (Ch. 2, 3, 5) allowed to draft the scope of information needed:

- General information on outward/inward processing,
- Detailed information on:
  - materials entrusted for processing service,
  - final products under processing service,
  - processing service,
  - service provider/client,
- Goods acquired/sold under merchanting
- Information to identify FGPs.
Identification of entities in global arrangements

Processing and Merchanting

1. Entities, which in ITSS for 2016 reported data on services related to processing and merchanting;

2. Entities selected for the pilot survey
   - processing - approx. 80% of revenues and expenditures due to trade in this type of services,
   - merchanting - over 90% of revenues and expenditures for trade in this type of services.
Identification of entities in global arrangements (2)

Factoryless Goods Producers

1. Selecting „potential FGPs”
   • Analysis carried out on the basis of the annual industrial products survey (PRODCOM) and the Annual Business Survey
   • Analysis limited to units that met criteria established by TF on FGPs
     o selected divisions/groups of NACE classification
     o set of variables and indicators (4 „high” and 9 „low”)

2. Pilot study - questionnaire
Pilot survey

• Reporting period of the pilot survey – 2016

• Two separate questionnaires
  ○ **GLOB questionnaire on processing services and merchanting**
    (3 modules: Inward processing, Outward processing and Merchanting)
  ○ **FGP integrated global accounts and global production**
Analysis of data

Goods for processing and merchanting

• Set of analytical tables elaborated in the project
  • Compilation of data for a selected entity and other national related units based on EGR and NBR (National Business Register),
  • Comparison of the entity revenues and costs,
  • Analysis of geographical breakdown of trade for inward and outward processing,
  • Analysis of the product structure according to CPA 2015
Analysis of data (2)

Selected information from registers for surveyed entities

<table>
<thead>
<tr>
<th>REGON</th>
<th>Entity name</th>
<th>NACE Rev.2 code (classes)</th>
<th>Name of class of the NACE Rev 2.</th>
<th>Information about entity analysed</th>
<th>Information about MNE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>...</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Data source:</strong></td>
<td><strong>1. EGR 2. NBR</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Employment, Legal form, Form of ownership, The foundation date, Position in the group (group head, intermediate parent entities, subsidiary unit), Country code for global group head (GGH), Availability of consolidated report, Obligation of inward/outward processing, merchanting.
## Analysis of data (3)

### The comparison of data on revenues and foreign trade

<table>
<thead>
<tr>
<th>Specification</th>
<th>Statistical reports</th>
<th>Exports</th>
<th>Imports</th>
<th>Pilot Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Annual product survey</td>
<td>SBS</td>
<td>FATS</td>
<td>ITSS</td>
</tr>
<tr>
<td>1. Net revenues from sale of products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which sales for export</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Value of sales of goods for export</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which value of export of goods to the parent unit and entities linked within the group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Value of sales of services for export</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which sales of inward processing services for export</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Value of export of services to the parent unit and entities linked within the enterprise group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Revenues from sales of goods and materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which sales for export</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Value of export of goods and materials to the parent unit and entities linked with the group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Export of goods in total (including goods under processing)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Export of goods (except for goods under processing)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Goods returned after processing (inward processing)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Goods received from abroad for processing (inward processing)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Balance on goods received from abroad for processing (inward processing)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Analysis of data (4)

- Cooperation with different statistical domains necessary
- Additional contact with respondents
- Identification of data gaps and reasons for data inconsistency

Part of the entities that recorded transactions under processing were not found in the foreign trade database – respondents were not direct exporters or importers of materials entrusted with processing.

- transfer of materials / final products based on the internal documents (goods received note, delivery note)
- customs clearance of the final product is made by the third party which manages the warehouse or by a customs office,
- customs procedures 621 (6121 and 6122) are applied – these procedures are not included in imports,
- different time of recording transactions in statistical surveys.

- Data form SBS, FATS, ITSS, Pilot survey were broadly coherent.
Case study 1 – Inward processing

1. Intermediate parent entity
2. Intermediate parent entity (resident)
Subsidiary 2
Merchant; (resident)
Subsidiary 3 (resident)
Foreign entity registered to VAT in Poland (non-resident; importer/exporter)

Rest of the world
Poland

Ultimate controlling unit
Intermediate parent entity
Intermediate parent entity at higher level
Other subsidiaries
Other subsidiaries
Other subsidiaries

surveyed entity
Case study 1 – Inward processing (current recording)

Exports of processing services

Physical movement of goods

Subsidiary 1, processing service (resident)

Imports of goods (NoT=11)

600 PLN

Subsidiary 2 merchant; (resident)

Imports of goods (NoT=11)
	negligible

Exports of goods (NoT=11)

negligible

Important information from the statistical financial report:

* Import of goods for sale = 100 PLN
* Value of goods and materials sold = 130 PLN

Exports of goods (NoT=11)

1200 PLN

Foreign entity registered to VAT in Poland (non-resident, importer/exporter)

Imports of goods (NoT=11)

400 PLN

Subsidiary 3 (resident)
Case study 1 – Inward processing (recording after adjustments)

Imported goods not crossing the border (NoT = 11) 100 PLN

Exports of processing services

Subsidiary 1; processing service (resident)

Exports of goods (NoT=11) negligible

Imports of goods for processing (NoT=41)

600 PLN

Imports of goods (NoT=11) negligible

Rest of the world

Physical movement of goods

Subsidiary 2; merchant; (resident)

Physical movement of goods

Rest of the world

1200 PLN

Imports of goods for processing (NoT=41)

400 PLN

Exports of goods after processing (NoT=51)

Foreign entity registered to VAT in Poland (non-resident, importer/exporter)

Subsidiary 3 (resident)

the change NoT codes
the estimated value of imported goods, that are not crossing
the border
surveyed entity

Rest of the world

Statistical Office of Poland
Case study 2 – Outward processing

Surveyed entity

Ultimate controlling unit

Intermediate parent entity

Subsidiary

Subsidiary

Rest of the world

Poland

Subsidiary, manufacturer (principal/contractor); resident
Case study 2 – Outward processing (current recording)

Surveyed entity

Country A

Imports of goods (NoT=11)

goods received from abroad for processing (NoT=41)

goods sent abroad after processing (NoT=51)

Exports of processing services

Subsidiary, manufacturer (contractor/principal) resident

Poland

Country B

goods sent abroad for processing (NoT=51)

Imports of processing services

lack of transaction on goods returned from abroad after processing
Case study 2 – Outward processing (recording after adjustments)

Exports of processing services

goods received from abroad for processing (NoT=41)

goods sent abroad after processing (NoT=51)

Imports of goods (NoT=11)

Subsidiary, manufacturer (contractor/principal) resident

country A

estimated value

surveyed entity

Poland

1000 PLN

goods sent abroad for processing (kod=51)

Imports of processing services; 500 PLN

1500 PLN

goods returned from abroad after processing (NoT=41)

Country B

country a
Factoryless Goods Producers

- Analytical tables elaborated in the project - review of information from different data sources including the results of FGPs pilot survey
- The units that met the criteria typical for FGPs were mainly selected on the basis of the PRODCOM survey, i.e. 10 units (out of 43), while only 6 units (out of 230) were selected on the basis of the Annual Enterprise Survey,
- 15 entities met the criteria typical for FGPs, however further analysis is needed (contact with the entity),
- 2 units identified as typical FGPs (also in IS-GVC survey)
Proposals for modifications of statistical surveys

• Enlargement of the subject scope of the quarterly survey ITSS
  Information about the estimated share of the value of the final product that remained on the national territory after the inward processing / returned to the territory of country after the outward processing.

• Enlargement of the data scope collected within the EXTRASTAT system by data concerning transaction conducted within the customs procedures 6121 and 6122

• Additional section to the PRODCOM survey, with the following filtering question: Did the company in the year xxxx outsourced completely manufacture of products, which subsequently were sold as its own products?
  If positive answer - supplementary FGP section containing additional questions concerning: IPPs ownership, control over the production process, ownership of materials used in manufacture of the products.
Conclusions

• GLOB questionnaire on processing services and merchanting - too detailed for respondents,
• FGPs questionnaires - good starting point for improvements in further analysis,
• Even if introduced, the new solutions will not capture all the problems resulting from global arrangements;
• Proposal of changes in public statistics,
• The exercise of detailed analysis of cohesion of data from different sources,
• Inconsistencies have been identified and explained,
• Different statistical surveys provide broadly coherent data (excl. FTS),
Conclusions (2)

• The phenomenon of globalization requires close cooperation and improvements in different statistical areas;

• Complexity of global production arrangements requires
  · individual analysis of the most important units
  · special approach for MNEs (NA based on data for legal units)
  · knowledge on the different aspects of business activities

• Establishment of LCU seems to be prerequisite for measurement of the most important global production arrangements.