Manufacturing services

Maintenance and repair

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William Cave
BPM6 – Change in services classification

Strict application of the change of ownership criterion in SNA 2008

Reclassification of goods and services items
Some items moved in Services Account from Goods Account and vice versa
BPM6 Main Services Components

1. Manufacturing services on physical inputs owned by others
2. Maintenance and repair services n.i.e.
3. Transport
4. Travel
5. Construction
6. Insurance and pension services
7. Financial services
8. Charges for the use of intellectual property n.i.e.
9. Telecommunications, computer and information services
10. Other business services
   Merchanting moved to Goods
11. Personal, cultural and recreational services
12. Government goods and services n.i.e.
What are manufacturing services?

• **Manufacturing services on physical inputs owned by others** includes activities such as processing, assembly, labelling and packing that are undertaken by enterprises that do not own the goods.

• Examples may include: oil refining, liquefaction of natural gas, assembly of clothing, and electronics.

• In balance of payments so a resident-nonresident transaction

• **Excluded** are the assembly of prefabricated construction (included in construction)

• and labelling, and packing incidental to transport (included in transport services).
1. Manufacturing services on physical inputs owned by others

**Services undertaken by enterprises that do not own the goods and are paid a fee**

- Assembly of clothing
- Assembly of electronics
- Oil refining
- Liquefaction of natural gas
- Labelling
- Packing

*Only the manufacturing fee is recorded under services*
Examples of manufacturing services 1

A Finnish company A sells copper refining services to its Sweden-based parent company B.

Copper ore comes from Sweden to Finland only to be transformed. The Finnish company A does not own the raw material or the final product; the ownership is in Sweden during the whole process.

The Finnish company A gets a manufacturing fee for the service. In this case, the finished product is returned to Sweden. This is a goods for processing case.

In the foreign trade statistics, raw material coming to Finland is marked ‘for processing’ and the end product is marked, ‘returned after processing’.
How do we calculate the **manufacturing fee**?

**Example 1**

<table>
<thead>
<tr>
<th>Difference</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing fee</td>
<td>120</td>
</tr>
<tr>
<td>Holding gains</td>
<td>80</td>
</tr>
<tr>
<td>Overheads</td>
<td>100</td>
</tr>
</tbody>
</table>

Not a simple subtraction....

X imports manufacturing services for 120 from Y

Y exports manufacturing services for 120 to X
Example 2

Manufacturing services that change the condition of the goods

Economy A
- A Buys oil for 10
- Processing fee 15

Economy B
- Goods imports

Economy C

Economy D
- Goods exports
- A receives 30

Manufacturing services
Examples of manufacturing services 2

Production of complete goods entirely by one firm for another, under the brand or label of the latter. Also referred to as “private label manufacturing,”

For example, Taiwanese company Foxconn Technology Group is the world’s largest contract electronics manufacturing company (described by Wikipedia as an electronics manufacturer providing electronics manufacturing services) having manufactured products such as:

- iPhone, Ipod, Ipad for Apple,
- Kindle Fire for Amazon,
- XBox for Microsoft,
- Wii and Playstation.

Employs around 1 million people in 8 countries but mainly in PRC China, Revenue in 2015 was $136bn, World’s 4th largest IT company.

Foxconn does not own the above outputs of its manufacturing. It is paid for assembling the product according to the product owners’ specifications.
Maintenance and repair services

- *Maintenance and repair services n.i.e.* includes maintenance and repair work by residents on goods that are owned by non-residents (and vice versa). The repairs may be performed at the site of the repairer or elsewhere.
- Maintenance and repairs of equipment including ships, aircraft, other transport equipment are included in this item.
- Services transactions between residents and non-residents

**EXCLUDED:**
- Cleaning of transport equipment is included in transport services.
- Construction repairs and maintenance are included under construction.
- Maintenance and repairs of computers are included under computer services.
2. Maintenance and repair services n.i.e.

Services performed by residents on goods that are owned by non-residents (and vice versa).

- Ships
- Aircrafts
- Other transport equipment
- Other...
Valuation of Maintenance and repair services

• The value recorded for maintenance and repairs is the value of the repair work done, not the gross value of the goods before and after repairs.

• The value of maintenance and repairs includes any parts or materials supplied and included in the price (parts and materials charged separately are excluded from services and included in general merchandise).

• Minor repairs that maintain the item in working order and major repairs that extend the efficiency or capacity of the good or extend its life are included.
Practical matters...

• Data collection strategy
  • Consider the manufacturing and processing in the country are their specific activities that are likely to important manufacturing services in exports and imports
  • Who are potential exporters and importers of manufacturing services?
  • For potential maintenance and repairs exports consider first major airports and seaports and which companies provide repairs there, machine tool manufacturers.
  • For potential maintenance and repair importers consider national airlines, ships operated by resident companies and major manufacturers
  • Can target questionnaires or include in a general trade in services survey or other sector surveys.
Potential data sources?

- What are the potential data sources:
  - ITRS, Business registers, General trade in services surveys, manufacturing or transport surveys, merchandise trade data on processed goods
- Are surveys possible and for which sectors? Can service questions be combined with manufacturing surveys?
Example questionnaires

• A guide to US BEA international services surveys
  • https://www.bea.gov/surveys/pdf/surveysu.pdf
• General services survey includes contract manufacturing services and maintenance:
  • https://www.bea.gov/surveys/pdf/be120.pdf
• UK ONS general services survey
• Google: ‘ONS IT IS survey’
Finally...

• Thank you for your attention

• Do you have any questions?