Implementation of the change of ownership principle in compiling trade in goods and services statistics in Hong Kong, China

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Leo YU
Email: lckyu@censtatd.gov.hk

Census and Statistics Department
Hong Kong, China
Introduction

- An update to the presentation on “Development of Trade in Goods and Services Statistics in Hong Kong, China” in the UNSD’s Regional Seminar on International Trade Statistics held in Oct 2011 in Beijing, China

- Implementation of the new international statistical standards based on the change of ownership principle in Hong Kong since 2012

- Particularly, the compilation of statistics on manufacturing services
Change of ownership principle

- Set out in the 2008 SNA and BPM6
- Re-classification of components in trade in goods (TIG) and trade in services (TIS) under GDP and BoP framework
- Another analytical perspective complementing conventional merchandise trade statistics
- Among other changes,
  - A new component under services: manufacturing services on physical inputs owned by others
  - Imports and exports of goods related to processing without a change of ownership to be excluded from trade in goods
Hong Kong’s outward processing activities

- Predominantly carried out in the mainland of China

- Processed goods are either
  - Returned to Hong Kong (mostly re-exported to other markets subsequently), or
  - Exported directly to other markets
HK’s outward processing activities in the mainland of China

1. Raw materials from Hong Kong to the Mainland.
3. Raw materials from Country A directly shipped to the Mainland.
4. Services fee for (a) processing fee and (b) raw materials purchased by the Mainland processing unit.

Then, processed goods are either:

(a) Case 1: Returned to Hong Kong (mostly re-exported to other markets subsequently), or
(b) Case 2: Exported directly to other markets.

Physical movement of goods
Ownership of goods
Cash flow

Country A
The mainland of China
Hong Kong
Country B
Case 1 – Outward processing in the mainland of China
(processed goods returned to HK for subsequent re-exports)

1. Raw materials ($80 million) from Hong Kong to the Mainland.
2. $70 million paid for procuring raw materials to the Mainland.
3. Raw materials ($70 million) from Country A directly shipped to the Mainland.
4. Services fee ($40 million) for (a) processing fee (b) raw materials purchased by the Mainland processing unit.
5. The processed goods ($70M + $80M + $40M = $190 million) returned to HK.
6. The processed goods ($200 million) re-exported to Country B.

<table>
<thead>
<tr>
<th>Conventional merchandise trade</th>
<th>Trade under change of ownership principle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exports</td>
</tr>
<tr>
<td>Goods</td>
<td>280</td>
</tr>
<tr>
<td></td>
<td>[80 + 200]</td>
</tr>
<tr>
<td>Balance of trade</td>
<td>+90</td>
</tr>
</tbody>
</table>
Case 2 – Offshore trade involving outward processing
(processed goods exported directly to other markets)

3. Raw materials ($70 million) from Country A directly shipped to the Mainland

2. $70 million paid for procuring raw materials

1. Raw materials ($80 million) from Hong Kong to the Mainland.

4. Services fee ($40 million) for (a) processing fee (b) raw materials purchased by the Mainland processing unit

5. The processed goods ($70M + $80M + $40M + Gross Margin of $10M = $200 million) directly shipped to Country B

6. Hong Kong received $200 million and earned a gross margin of $10 million ($200 million - $190 million)

**Conventional merchandise trade**

<table>
<thead>
<tr>
<th></th>
<th>Exports</th>
<th>Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merchanting services</td>
<td>10</td>
<td></td>
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</table>

**Trade under change of ownership principle**

<table>
<thead>
<tr>
<th></th>
<th>Exports</th>
<th>Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods</td>
<td>[200]</td>
<td>[70]</td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing services</td>
<td>40</td>
<td></td>
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</tbody>
</table>

Balance of trade: +90

Balance of trade: +90
(1) Data source

- To collect the information through statistical surveys instead of modifying trade declaration requirements

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data supplier</td>
<td>• High reporting burden</td>
</tr>
<tr>
<td></td>
<td>• Less willing to provide exact figures through declaration</td>
</tr>
<tr>
<td>Data compiler</td>
<td>• Long time for legislative amendment</td>
</tr>
<tr>
<td></td>
<td>• High costs to modify relevant IT systems for trade declaration</td>
</tr>
<tr>
<td>Data user</td>
<td>• Time consuming processes would defer the availability of relevant statistics</td>
</tr>
</tbody>
</table>
**Additional data requirement in Case 1**  
*(outward processing in the mainland of China)*

**Country A**  
1. Raw materials ($80 million) from Hong Kong to the Mainland.

**The mainland of China**  
4. Services fee ($40 million) for (a) processing fee and (b) raw materials purchased by the Mainland processing unit.

**Country B**  
6. The processed goods ($200 million) re-exported to Country B.

**Hong Kong**  
5. The processed goods ($70M + $80M + $40M = $190 million) returned to HK.

**Physical movement of goods**  
(−⇒ Sample survey based on trade declarations feasible)

**Ownership of goods**

**Cash flow**

Through the **Survey on Trade involving Outward Processing in the Mainland of China (“OP Survey”)** to

(a) Collect information on whether change in ownership has involved, and further

(b) Apportion the imports concerned into  
   (i) raw materials sent from HK  
   (ii) raw materials acquired aboard  
   (iii) services fee (including processing fee and raw materials procured by the processing units in the Mainland)
Survey on Trade involving Outward Processing in the mainland of China ("OP Survey")

(A) Background

- Conducted since Q3 1988
- Trade declarations as sampling unit, traders as respondents
- Stratification based on commodity group
- Estimate the relative shares among raw materials and processing fee in the trade value
(B) Enhancement since 2008

- Additional information on change of ownership
  - “Processing and assembling” arrangement (no change in ownership) VS.
  - “Processing with imported materials” arrangement (involve change in ownership, thus conventional trade)

- Double the quarterly sample size to around 28,500 declarations
Additional data requirement in Case 2
(Offshore trade involving outward processing)

1. Raw materials ($80 million) from Hong Kong to the Mainland.
2. $70 million paid for procuring raw materials.
3. Raw materials ($70 million) from Country A directly shipped to the Mainland.

Case 2

- Physical movement of goods
- Ownership of goods
- Cash flow

Hong Kong

4. Services fee ($40 million) for (a) processing fee (b) raw materials purchased by the Mainland processing unit.

5. The processed goods ($70M + $80M + $40M + Gross Margin of $10M = $200 million) directly shipped to Country B.

6. Hong Kong received $200 million and earned a gross margin of $10 million.

- Sample survey based on trade declarations infeasible
- New Quarterly Survey of Merchanting and Other Trading Activities to collect the required information.
New Quarterly Survey of Merchanting and other Trading Activities

(A) Background

- Annual Survey of Imports and Exports of Services (“ASIES”) since 1999
  - Conceptual framework based on BPM5
- Business establishments as sampling units
- Stratification by industry
- Cover all offshore trade
  - Those involving outward processing
  - Merchanting (i.e. not involving outward processing)
New Quarterly Survey of Merchanting and other Trading Activities

(B) Enhancement since 2010

• Redesigned the ASIES to collect additional information on change of ownership

• Introduced a quarterly survey launched since Q1 2010
  – To supplement the annual survey
  – Around 4 000 establishments sampled
  – Similarly conducted
  – Focused on key estimates: trade value involved and the relative shares among raw materials and processing fee
(2) Terminologies used in surveys

- To use commonly adopted **business terms** and to avoid using **difficult statistical terms** as far as practicable

<table>
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<tr>
<td>Data Supplier</td>
<td>• Statistical terms and definitions are difficult to understand (On the other hand, “processing and assembling” and “processing with imported materials” are two established inward processing arrangements in the mainland of China)</td>
</tr>
<tr>
<td>Data compiler</td>
<td>• Clear and practical definitions to determine whether “change in ownership” has occurred</td>
</tr>
<tr>
<td></td>
<td>• Choice of wording relatively less important</td>
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Implementation issues
(3) Key estimates of the surveys

(3) Key estimates of the surveys

• To estimate relevant structural ratios at broad level instead of exact trade figures for individual commodity

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<td>Data supplier</td>
<td>• Easier to provide (estimates are reliable and acceptable)</td>
</tr>
</tbody>
</table>
| Data compiler     | • Robust in estimation  
• Survey costs  
• Structural ratios are required for estimation at macro-level, while there is no need for detailed commodity breakdowns (GDP and BoP) |
| Data user         | • Coherent trade and national accounts statistics                                                                                         |
Case 1 –

Outward processing in the mainland of China

• Imports of manufacturing services accounted for around 20% of the final value of the goods (i.e. import value of goods)

Case 2 –

Offshore trade involving outward processing

• Imports of manufacturing services accounted for around 20% of the final value of the goods (i.e. the cost of goods sold offshore)
Result: Imports of manufacturing services

Imports of manufacturing services on physical inputs owned by others

(US$ billion)

Share of imports of services (%)

Share of imports of services

Result: Trade in goods balance

Balance of trade in goods under the old and new standards

US$ billion

Trade in goods balance under the old standards
Trade in goods balance under the new standards

Result: Trade in services balance

Balance of trade in services under the old and new standards

US$ billion


-20 0 20 40 60 80 100

Trade in services balance under the old standards
Trade in services balance under the new standards
Implementation issues (4) Dissemination of results

(4a) Dissemination of results - parallel series

• To release TIG and TIS series in GDP Report according to the conventional and new standards in parallel, with data series backcast to 1980s

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<tr>
<td>Data compiler</td>
<td>• Marginal costs acceptable</td>
</tr>
<tr>
<td>Data user</td>
<td>• Support different analytical perspectives</td>
</tr>
<tr>
<td></td>
<td>• Statistics compatible with other economies</td>
</tr>
<tr>
<td></td>
<td>• Sufficiently long time series in both standards to support analytical</td>
</tr>
<tr>
<td></td>
<td>needs (e.g. econometric models)</td>
</tr>
</tbody>
</table>
(4b) Dissemination of results : headline series

- To retain the *conventional* TIG and TIS series as the headline GDP when the *new* TIG and TIS series were introduced in 2012

- Sufficient transition period (4.5 years) allowed until shifting to the new TIG and TIS series as headline series se in Q4 2016.

<table>
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</thead>
<tbody>
<tr>
<td>Data user</td>
<td>• Sufficient time to get used to the new standards</td>
</tr>
<tr>
<td></td>
<td>• Transitional time allowed for revising relevant analytical frameworks and models</td>
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</tbody>
</table>
Thank You