Factoryless Goods Production – a Case Example from Current Prices to Volume Measures in Finland

Mirjami Rajala and Lotta Sjöblom
Group of Experts on National Accounts, 31 May – 2 June 2017
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• Global production adjustments in Finland
• FGP case company
  • Identification: sources
  • Decision: industry, product, price
• Challenges
Finland: Global production adjustments in 2014

% of export/import of goods totals

**CUSTOMS: EXPORTS OF GOODS TOTAL (FOB)** 55 973 M€
- Inward/Outward processing: Not Codes 4/5
- Inward: Goods for processing in Finland: -5.5% (-0.9%)
- Outward: Goods for processing abroad: +4.3%
- Merchanting: +0.5%
- Factoryless goods production: +2.6%

**NA: EXPORTS OF GOODS TOTAL (FOB)** 56 447 M€

**CUSTOMS: IMPORTS OF GOODS TOTAL (CIF)** 57 769 M€
- Inward/Outward processing: Not Codes 4/5
- Inward: Goods for processing in Finland: -2.9% (-0.6%)
- Outward: Goods for processing abroad: +3.1%

**NA: IMPORTS OF GOODS TOTAL (FOB)** 55 009 M€

% of export/import of services totals

**NA: EXPORTS OF SERVICES TOTAL** 20 035 M€
- Inward processing: Processing fee: (5.2%)

**NA: IMPORTS OF SERVICES TOTAL** 23 384 M€
- Outward Processing: Processing fee: (3.4%)

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### Finland: Global production adjustments in 2014

#### % of export/import of goods totals

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**Effects on inward processing**
Finland: Global production adjustments in 2014

Effects on outward processing

% of export/import of goods totals

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## Finland: Global production adjustments in 2014

### Effect on factoryless production

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How global production adjustments are done?

- Influence on total trade is not very big
- Case by case analysis, covering about 70 companies
- Finland is a small economy – big firms dominating, change in a global production activity could affect the surplus/deficit in trade balance
- Statistics Finland publishes quarterly *International trade in goods and services* statistics where the differences between ITGS and BOP are explained in aggregated level
FGP case company – Identification and analysis in NA / Step I

**PRIMARY SOURCES**

- **FINANCIAL STATEMENTS INQUIRY FOR ENTERPRISES**
  * turnover from trade
  * MARGIN – not deliveries of products
  * no raw-material costs, high costs on R&D, marketing, subcontracting

- **INQUIRY ON INTERNATIONAL TRADE IN SERVICES AND INTERNATIONAL FLOWS OF GOODS**
  * records sales and purchases of FGP incl. counterpart countries

- **SALES INQUIRY**
  * high share of turnover from sales abroad to abroad

- **BUSINESS REGISTER**
  * NACE – manufacturing

- **PRODCOM**
  * no product information

- **INTERNATIONAL TRADE IN GOODS STATISTICS (CUSTOMS)**
  * small share of goods export compared to turnover

**GUIDELINES**

- **GUIDE TO MEASURING GLOBAL PRODUCTION (2015)**
  * recommendations for FGPs

- **ESA2010 and BPM6**

- **ARTICLES ABOUT FGP**

**SUPPORTING SOURCES**

- **FIRM’S ANNUAL REPORT**
  * information about outsourcing production abroad

- **LCU COMPANY VISIT**
  * company defined itself to be FGP

- **EMPLOYMENT STATISTICS**
  * major share of company workers are experts (engineers, designers etc.)

**COMPANY, OUTPUT, PRODUCT, INDUSTRY AND COUNTERPART COUNTRY INFORMATION**

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FGP case company – Identification and analysis in NA / Step II

PRICE SOURCES for NET basis
- PRODUCER PRICE INDICES
- VOLUME INDEX FOR WHOLESALE TRADE

GUIDELINES & LEGISLATION
- HANDBOOK ON PRICES AND VOLUME MEASURES IN NA (2016)
- THE MANUAL ON PRODUCE PRICE INDICES (IMF)
- STS REGULATION
- THE METHODOLOGICAL GUIDE FOR DEVELOPING PRODUCER PRICE INDICES FOR SERVICES (EUROSTAT&OECD)

PRICE AND VOLUME INFORMATION

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FGP case company – Identification and analysis in NA / Step III

CO-OPERATION IN-HOUSE

- NA GLOBAL PRODUCTION COORDINATOR
- BOP TEAM
- SOURCE STATISTICS and LCU EXPERTS
- NA SENIOR ADVICER
- DEFLATION GROUP
- NA ENTERPRISE TEAM
- NA SUT TEAM

COMPANY, OUTPUT, PRODUCT INDUSTRY AND COUNTERPART COUNTRY INFORMATION

SUPPLY AND USE TABLES BY PRODUCTS IN CURRENT AND FIXED PRICES

PRICE AND VOLUME INFORMATION

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FGP a case company – Decision in NA / Step IV

• **Previously:** One big player – the electronic and telecommunication cluster outsourced production abroad already mid of 2000s, before FGP was not a topic
  - ESA2010 & BPM6 not available
  - NA decided to split the margin into the service products in SUT according to the activities of these companies in Finland – R&D, head office and agency services

• **Now:** More companies are acting as FGPs
  - Wider variety of players and products produced
  - Methodological change from statistical year 2014 onwards to show output in goods
  - Similar treatment in NA and BOP (integrated IT system will be in use June 2017)

...continues
FGP a case company – Decision in NA / Step IV

• Supporting factors:
  a) to identify FGPs
    o In company visit by LCU the company defined itself as FGP
  b) to show output in GOODS instead of SERVICES
    o The end-user buys the final product and IPP “services” are only a component of the final product
    o Is also recommended in Global Production Guide
  c) to show NET instead of GROSS
    o The principal does not supply material inputs, no information about the content of intermediate consumption, what is the price to use
  d) to keep FGPs in MANUFACTURING instead of TRADE
    o Decision of Statistics Finland: manufacturing firms that have outsourced production abroad are classified according to the final products they are producing globally
    o Flagging of FGP firms from merchants because of the high IPP content in products
### COMPANY INFORMATION

<table>
<thead>
<tr>
<th>Company ID</th>
<th>Company name</th>
<th>NACE</th>
<th>CPA</th>
<th>CPA heading</th>
<th>Basic price</th>
<th>CPA</th>
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<th>Basic price</th>
<th>118W Wholesale trade margins</th>
<th>Purchasers' price</th>
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<tr>
<td>0909090-1</td>
<td>EQUIPMENT LTD.</td>
<td>28</td>
<td>28</td>
<td>Machinery and equipment n.e.c.</td>
<td>90 000 000</td>
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<td>10 000 000</td>
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**FGP a case company – SUT price & deflating / Step V**

- On **SUPPLY** side, EQUIPMENT LTD's production is divided into two products: "final product" CPA 28 (90%) and wholesale trade services -product CPA 46 (10%).

- On **USE** side, EQUIPMENT LTD's production is shown only as a "final product" CPA 28 with value items "basic price" and "wholesale trade margin".

### DEFLATION:

- **PPI Export price index (CPA 28)**
- **Wholesale trade price index (CPA 46)**

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Prices and volumes of FGP

• At the moment there is no specific recommendation for volume measures on FGP

• Statistics Finland studied question and came to conclusion, that FGP could be deflated with principles that are recommended for the merchanting margin

• Price information which is available is limited. PPI for export covers only export from Finland, not export from other countries. Volume index for wholesale trade covers domestic firms' total revenues, not the margin
Do we reach the target?

- Do we have right industry GDP volumes?

- The current values are more or less “correct” based on financial statements of firms, but have we chosen right products and/or prices?

→ ESA2010 requirements are reached, but compiling routines of experts and IT system don't yet fully support analyzing global production phenomena. We have just started a SUT IT project and we hope, that it will also help compiling
International challenges

• Do international organisations have any plans to support NSIs global production volume calculations in practice?

• FGPs NACE industry?
  o UN ISIC Rev 4.: Trade but further research needed
  o NAICS 2017: FGPs recommendation not implemented, further research needed (Federal register notice: 79 FR 46557)

• Global production adjustments – country practices differ?
Thank you

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Lotta Sjöblom
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