Implementation of the new guidelines concerning processing activities in Denmark – consistency problems detected

Item 4a


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BPM6/SNA2008 implementation in Denmark...

Consistency Problems detected

An other major revision is needed

Well...
Time line

- Significant problem with the reporting of processing activities detected shortly before the BPM6 figures were released in October 2014
- Investigation of foreign activities of selected larger Danish enterprises – first results June 2015
- First (limited) results published – working paper, October 2015
- Revision (2005-) of BOP, ITGS and ITSS in October 2016
- Revision of the National Account (2005-) in November 2016 (integrated economic statistics! –BOP ans NA fully aligned)
The current account balance before/after the consistency check (etc.)
Background

- Implementation of guidelines concerning processing activities in Denmark
  1. Identify and adjust for goods flows to/from processing (detailed level)
  2. Collect new information
     - Manufacturing services on physical inputs owned by others
     - Materials bought abroad intended for processing abroad
     - Goods sold abroad after processing abroad
     - Merchanting – no changes in Denmark
  3. Validation
     - NoT and CPC (used to identify goods flows)
     - Combined check of ITSS and ITGS

- All looked fine…😊
Things we don't know we don't know

- NA found (when implementing SNA2008/ESA2010) a significant inconsistency between manufactures' sales (prodcom) and total turnover (SBS) - merchanting and processing activities…not reported to the ITSS/BOP as well

- Other cases? – yes, significant under reporting of goods sold abroad after processing abroad => project established to compare related information from different sources - ensure consistency in collected data and the quality of the BOP
Domains and variables included in the consistency check

**International trade in goods statistics (ITGS)**
- Flows of goods to/from processing
- Total imports and exports of goods (with change of ownership)

**International trade in services statistics (ITSS) + BoP**
- Manufacturing services
- Materials bought abroad intended for processing abroad
- Goods sold abroad after processing abroad
- Merchanting, gross flows
- Total imports and exports

**Business accounts/structural business statistics (SBS)**
- Total turnover
- (Turnover own goods)
- (Turnover commercial goods (resale))
- (Cost of goods for resale)

**Manufacturers’ sales of goods (prodcom)**
- Sales of own goods
- Commercial goods (resale) turnover
- Contract work for other enterprises
- (Other turnover)

**Industrial turnover & production/short term statistics (STS)**
- Export turnover (own goods)
- Domestic turnover (own goods)

**Supplementary information**
- VAT
- European Sales List (triangular trade)
- OFATS (number of affiliates)
- Enterprise groups
- Manufacturers’ purchases
- enterprises financial reports
Experiences/results

• Looking across statistical domains have made it possible to see the full picture and identify errors that within a single (or few) fields seemed correct.
Experiences/results

• Merchanting sales and goods sold abroad after processing often account for the discrepancies to the total turnover...significant under reporting of goods that do not cross the border

• This is especially a problem for MNEs, where transactions within the enterprise group often seems to be flying below the radar
Experiences/results

• Trade with intellectual property rights and manufacturing services are also underreported
• Very useful to study the financial reports
• Imperative to fully understand the business case/int.org. of production – id relevant transactions
• Implementation of new future data requirements have to be tackled differently - need to be more proactive – awareness + understanding
• Need to inform companies about the linkages (will improve consistency in the reporting situation)
• Attention to non-residents trade in ITGS
Implication for future work – a large cases unit (LCU)

- The analysis has been a game changer
- Statistical domains to be considered included in the future LCU:
  - Business account (SBS), Manufactures’ sales, Industrial turnover (STS), International trade in goods, International trade in services (and balance of payments), Register based employment statistics, and Research, Development, and Innovation statistics
  - Register based enterprises statistics, VAT statistics, Labour cost statistics, IFATS, OFATS, Enterprise Group statistics
  - ICT use in enterprises, Manufactures’ purchases, Producer price index for commodities and for services

- Ensure consistency at an early stage of the production process - beneficial for not only the primary statistics involved but also for the national accounts.
Implementing revised im- and export figures in the s-u tables

• When implementing the revised SNA2008/ESA2010 guidelines related to Processing and Merchanting in the national accounts we used im- and export data according to BPM6
• The problems in im- and exports were revealed in this process:

*It was not possible to balance some products (high values, high degree of globalisation, involved in merchanting/processing)*
Implementing revised im- and export figures in the s-u tables

- In the s-u tables we confront data at the detailed (product) level using various sources of information

- Three important sources are:
  - Structural Business Statistics (Business accounts)
  - Manufacturer’s Sales of Goods (Danish Prodcom)
  - ITSS/ITGS/BoP (international trade statistics)
Danish supply-use table

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2.350 products

Industries

2.350 products

Industries
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Balancing problems

Example of a balancing problem and solution:

Due to inconsistencies in the primary statistics, supply to domestic use was much too high.

- Solution in the first place (2014):
  Converting output of goods to trade margins

- The BoP project showed that the export value had been too low (lacking value of goods exported after processing)

• Generally, the mis-reporting of merchanting and goods exported after processing affects GDP and the goods and services account.
Balancing revised im- and export figures

Implementing the revised BoP (im- and export) has affected the goods and services account:

**GDP production side:**
- Revision of value added mainly in manufacturing and trade

**GDP expenditure side:**
- Upward adjustment of net-export (=BoP)
- GFCF and changes in inventories affected (varies over the years)
- Household final consumption expenditure only marginally affected
- Government and NPISH final consumption expenditure unchanged
Conclusion

- The confrontation of different primary statistics in the s-u tables makes it possible to detect inconsistencies and solve them in this framework.

- Making consistency checks at an earlier stage as part of the validation of primary statistics is expected to have a positive effect on the quality of the s-u tables and GDP.