Challenges in compiling price and volume measures related to global production

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Deflation process - recommendations

• Deflation should take place at product level (ref Eurostat’s Handbook on prices and volume measures in national accounts, 2016, chapter 2)

• Reason for choosing product approach: prices and volumes are first of all observed for products

• Double deflation: output and intermediate consumption (by product) deflated separately

• (tool: supply and use table framework)
Regarding goods for processing - recording

- Goods sent for processing abroad from country A
  - Domestic production in country A equals total sales value of the goods,
  - The service fee from the foreign supplier recorded as intermediate consumption in A (service)
  - Export from A: The goods sent abroad for processing are not recorded in the trade data until they are “finally” exported (change ownership)
- Import to A: Service fee
Regarding goods for processing and merchanting … cont

- In theory this gross recording will not influence value added (compared to recommendations in the 1995 SNA),
- Neither will net export be influenced
- At least this is the case for current prices
- What about constant price estimates?
Constant price estimations - challenges/questions

- Which price indices should be used?
- Do the domestic PPI cover the “production” properly?
- Export prices – should be aligned with the PPI. Does the relevant price indices cover the new concept of not recording exports until the change of ownership takes place?
- And how do we collect the price index of the service fee (import/intermediate consumption in A)?
What is a suitable SPPI for the service fee (either you need it for import and intermediate consumption in A or you need it for production and export in the processing country B)?

The challenges of finding a suitable price index are discussed in Eurostat’s handbook chapter 3.9.3.

To sum up: deflating with the domestic PPI does not reflect the total volume growth in production (as it is constructed today) and it is difficult to achieve a proper SPPI for the service fee.

Hence, value added at constant prices will be affected (compared to the “old” system).

And what about the relevance and interpretations of productivity analysis?
Merchanting

- Same challenges or even larger?
- According to the new recommendations: Both purchases and sales of merchanted goods are recorded under exports
  - Purchases are shown as negative exports of goods
  - Sales are shown as exports of goods
  - Net export is not affected in current prices (compared to the “old” recommendations), only the recording of goods and services respectively
  - In the production account output should be equal to “trade margins” (and equal to net exports of the goods)
Merchanting ........ cont

- How can the country where the merchant is resident, receive relevant prices to be used for double-deflation?

- Challenges are discussed in Eurostat’s handbook, chapter 3.9.2
  - Eurostat points out that it is important to use the same price index for both the sales and the purchases (to avoid biases)

- This is more or less similar to only deflate the net export (equal to the trade margin)
  - However, a price index is needed – which index (and should we require same result as if sales and purchases are deflated separately?)
For discussion

- What do countries do, both regarding goods for processing and goods for merchanting?
- Where do you find appropriate price indices for the double-deflation?
- In general, how do you find good price indices for import of services (challenges are not only related to merchanting and goods for processing)?
- Do we need further work (international cooperation) in this field, or do you find that Eurostat’s “Handbook on prices and volume measures in national accounts” gives all the necessary recommendations?