CZECH APPROACH TO PRICE AND VOLUME MEASURES OF GLOBAL PRODUCTION

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Outline

- Motivation
- Price and volume measures in Czech national accounts
- Deflation of foreign trade
- Deflation of merchanting, processing services, re-export
- Conclusion
Motivation

- Globalization
- Introduction of ESA 2010
  - Fully implemented in September 2014
  - Revision of time series (1990 onwards)
  - New approaches implemented
Price and volume measures in the Czech Republic

- Annual national accounts are deflated within supply and use tables
- Product division: CPA 2 or 3 digit
- Transformation from purchasers’ prices to basic prices
- Consistent deflation of exports and imports in supply and use side
Deflation of foreign trade

- Following types of exports and imports are recognized:
  - Goods
    - Merchanting
    - Re-exports
    - Other goods
  - Services
    - Processing services
    - Purchases of residents / non-residents
    - Other services
- Specific deflation method is applied on each type
- Product breakdown
Deflation of merchanting

- Export of merchanting (traditional merchanting)
  - Net principle of recording (margin only)
  - Sales / purchases surveyed directly
  - Product that is traded (e.g. CPA 35)
  - Ratio of margin to basic prices cannot be used
    - Basic prices = 0
    - See the example:

<table>
<thead>
<tr>
<th>Product (CPA code)</th>
<th>Label</th>
<th>Purchasers’ prices</th>
<th>Trade margin</th>
<th>Basic prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>Electricity, gas, steam</td>
<td>100</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>46</td>
<td>Wholesale trade service</td>
<td></td>
<td>-100</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>
Deflation of merchanting

- Double deflation method
  - Purchases
  - Sales
- PPI of countries where goods are purchased / sold
  - Actually group of countries
  - Product structure: no information from the survey
    - Assumption NACE ~ CPA
Deflation of merchanting

- Inverse (negative) merchanting
  - Not recognized by ESA 2010
  - Mirror case of traditional merchanting
  - Deflation
    - Import price indices
Re-export

- Similar to merchanting
  - Difference in physical movement (crossing borders of domestic economy)
  - Gross recording according to Manuals

- Deflation
  - Import:  - price indices of import
  - Export:  - price indices of import (goods)
             - ratio of margin to basic prices (margin)
Processing services

- Czech approach
  - Export: PPI
  - Import: import price indices
Conclusion

- Globalization influences deflation techniques
- No special price indices available
- Intermediation services evolve (e.g. Uber)
Thank you for your attention