Volume measurement of services
Discussant presentation
Agenda item 4

Mariagnese Branchi

Group of Experts on National Accounts
Geneva, 2 May 2012
Contributions: Market & Non-Market Services

- On volume measures of retail and wholesale services in Canada

- On volume measures of general government education and health services and research and development in Slovenia.

- On volume measures of health care in Japan (background document).

- On using SPPIs to deflate market services in Norway
Retail and wholesale services

- Clear and simple description of the methods used with for both annual and monthly estimations

- Provides basic guidance for possible implementation with specific issues to be addressed

- e.g. industry based price indices to be applied to individual commodities
Retail and wholesale services

- Special considerations when collecting margin prices:
  - Zero or negative margins excluded from the calculation:
    - New products → product group averages?
    - Clearance sales → use of quantities/transactions to moderate the volatility of margin prices?

- Quality of the service provided (e.g. faster or more convenient service) by construction with margins is generally not take into account
  → any attempts to take quality into account?
In Slovenia:

- Most acceptable methods or acceptable alternatives

- Interesting comparison of input-output methods
  The results for education
  - Volume Growth 2001-2009 difference 4.3%
  - Volume growth of input measure more volatile?

- Treatment of quality changes: you might elaborate on how the quality criteria are applied (e.g. critical mass, proportional relationship)
Healthcare services

- **Slovenia** - DRG system for most hospital services
  - other direct output measurement for medical practitioners.
  - No additional quality adjustment

- **Japan** - Cost-weighted Output Index
  - results affected by the stable number of treated patients
  - Use of a *survival rate* as indication of the quality of treatment (cancer): results give a 0.6% increase in the output index between 1999-2008
Comments

- Strong assumptions difficult to justify and lack of information
  
  E.g. rate of change of quality equivalent to that of the number of patients or students per teacher

- Simple output measures tend to be sticky
  
  Not so much variation in output measure make difficult the application of standard econometric techniques
Indicators used to measure output or quality might be regulated: influence on output?

- Higher education:
  - Advance to higher classes in education

- Healthcare: number of beds of hospitals
  - Relevance of budgetary restrictions (e.g. treatment in hospital or day hospital paid by national health insurance or privately)
Quality adjustment of non-market services output measures

• SNA2008: quality adjustment of output measure
• ESA2010: for *comparability* output indicators *should not be quality adjusted* in core accounts

• Homogeneous product
• Quality/productivity aspects in the stratification / weighting
• Sampling and quality adjustment should be tackled together

→ No adjustment better than simple quality adjustment?
Deflation indices and methods in Norway

• Interesting methodology for SPPI for business services based on charge-out rates

• Includes detail product specification and stratification by staff qualifications: is the service quality well captured?

• Difficult to judge without detailed information

• Export and imports of services: current price estimates using domestic price indices

• Import prices likely differ most from domestic market and most urgent
Discussion issues

- Retail and wholesale
  - Inclusion of changes in the quality of services
  - Zero and negative margins treatment

- Education and health output – adjusted for quality changes? No adjustment for comparability?

- Regulation influence on non-market output?

- Services Price indices
  - based on hourly charged out-rates
  - Import and export prices