Nowcasting of PPP

Consultation on the ECP Geneva 2003

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Outline of the presentation

- The tests
- Data availability
- Different versions of nowcasting
- The results of the tests
- The conclusions

The tests

- ➔used real-time data to simulate how nowcast would have been executed in t+4 for the reference year t
- ➔wanted to see if nowcast gets better if it is executed at more disaggregated level
- ➔“better” means that nowcasted PPPs are closer to actual PPPs
- ➔November 2002: Member States and year 2000 only
- ➔March 2003: all participating countries and years 2000 and 2001

Data availability at t+4

- **Prices:**
  - **results of the first consumer price survey of previous year or no survey results at all; extrapolation necessary**
- **Extrapolation factors for consumer prices:**
  - **HICP**
  - **national CPI**
- **GDP:**
  - **first estimate for t from the t+4 delivery**
- **Expenditure weights:**
  - **only main aggregates available from the t+4 delivery; weight's structure of the previous year to be used for PHC**

Different versions of the nowcast (1)

1. Extrapolation of PPPs at total GDP level
2. Extrapolation of PPPs at main aggregates level
3. Extrapolation of PPPs when PHCE are broken down by 15 categories
4. Extrapolation of PPPs when PHCE are at basic heading level

Different versions of the nowcast (2)

- Versions are different by level of extrapolation of PHCE
- version 2 to 4:
  - net tourist purchases : exchange rate
  - GFCF: implicit deflator from NA
  - changes in stocks: reference PPP of GFCF
  - Government FCE: implicit deflator from NA
  - NPISH: implicit deflator of sum of PHCE and NPISH
  - Net exports: exchange rate
  - normal EKS aggregation procedure

The results (1)

- ➔More disaggregated extrapolation of PHCE results in better nowcast PPP
- ➔Moving from PHCE breakdown by 15 categories to 200 (BH) does not give raise to more accuracy
- ➔deviations between nowcast and actual PPP are bigger outside PHCE
- ➔the nowcast can only be as good as the input data are in prices and NA

The results (2)

- **Main problems:**
  - **significant changes in level of GDP between nowcast and actual PPP (2000: Poland, Slovakia, Estonia, Norway and Denmark; 2001: Norway and Turkey)**
  - **significant changes in population figure and exchange rate (non-members of Euro-zone)**
  - **quality problems with the input data, such as breaks in the timeseries (2000: Cyprus)**
  - **extreme changes in relative prices (2000: Norway)**

Conclusions (1)

➔ **The most reliable and cost efficient way of nowcasting seems to be version 3:**

- **extrapolation of PHCE at level of 15 categories with HICP or national CPI**
- **extrapolation of NPISH by implicit deflator of the sum of PHCE and NPISH**
- **NA implicit deflators for GFCF and GG**
- **reference PPP of GFCF for changes in stocks**
- **exchange rate for net tourist purchases and net exports**

Conclusions (2)

- ➔Method 3 will be used for the May 2003 nowcast for the reference year 2002
  (written procedure with participating countries)
- ➔nowcast is sensitive to problems in input data; revision results should improve future nowcasts
- ➔By October 2003 another test will look again into nowcasting at basic heading level and compare it with method 3