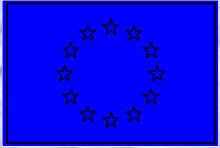


Nowcasting of PPP

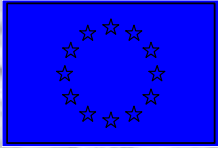
Consultation on the ECP Geneva 2003

W.P. 9



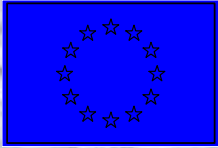
Outline of the presentation

- **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:

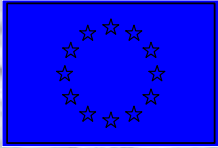
- ✉ HICP
- ✉ national CPI

→ GDP:

- ✉ first estimate for t from the t+4 delivery

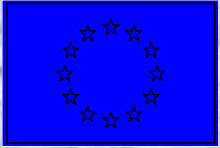
→ Expenditure weights:

- ✉ 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**

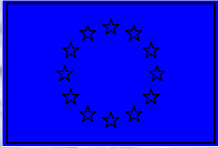


Different versions of the nowcast (2)

→ Versions are different by level of extrapolation of PHCE

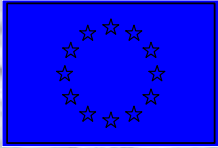
→ version 2 to 4:

- 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)

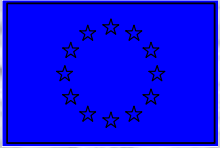
- More disaggregated extrapolation of PHCE results in better nowcast PPP
- Moving from PHCE breakdown by 15 categories to 200 (BH) does **not** give raise to more accuracy
- deviations between nowcast and actual PPP are bigger outside PHCE
- the nowcast can only be as good as the input data are in prices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



The results (2)

→ Main problems:

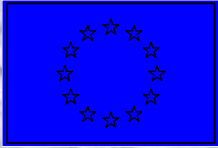
- ☒ significant changes in level of GDP between nowcast and actual PPP (2000: Poland, Slovakia, Estonia, Norway and Denmark; 2001: Norway and Turkey)
- ☒ significant changes in population figure and exchange rate (non-members of Euro-zone)
- ☒ quality problems with the input data, such as breaks in the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