Euro Area and European Union GDP flash estimates at 30 days

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Session 7F:
Meeting the Measurement Challenges of Official Economics Statistics Offices
Outline

- Background/objectives
- Motivation and user needs
- Estimation methods
- Quality acceptance criteria
- Results and conclusions
- Questions and comments
Background

- Eurostat publishing quarterly GDP flash since 2003
  - T+45
- 30 day estimate cited as next step
- Task force of member states struck in May 2013
  - Share information and best practices
  - Country by country overview of sources
  - Guidance document on estimation techniques
  - Develop method for euro area and EU
  - Develop quality acceptance criteria
  - Prepare test estimates
  - Communications plan
Background (2)

Why introduce T+30 Flash GDP?
- Policy decision makers need quality data sooner
  - European Commission
  - European Central Bank
- Economic analysis
- Monetary policy
- Forecasting and projections
Background (3)

- Principal European Economic Indicators
  - **30 days**: advance estimates of GDP, employment
  - **60 days**: preliminary GDP, main expenditure and output components, flash BoP
  - **90 days**: comprehensive quarterly estimates of GDP, main expenditure and output components, financial and non-financial accounts for institutional sectors and BoP
Estimation methods

- What is a flash estimate of GDP?
  - Not a forecast or a nowcast
  - Early picture of economic development published as soon as possible after the end of the quarter
  - Based on less complete info than traditional estimate
  - More limited breakdowns
  - Generally only produced for most current quarter
  - Trade-off between timeliness and accuracy
  - 3rd month in quarter often modeled in source data (ADL, ARIMA, ARIMAX)
Estimation methods (2)

- Annual and quarterly European national accounts
- GDP t+45 flash estimates
- Method for producing T+30
  1. Group of member states send growth rates at T+29:
     • Those who already publish at T+30 and others who provide confidential info
  2. Combine available data using weighted aggregation formula
  3. Estimate missing country data
  4. Use economic sentiment indicator to “top up” problematic rounding cases
  5. Derive chain linked volume estimates for Euro area and EU
Quality Acceptance Criteria

1. Unbiased GDP t+30 flash estimate
   • Unbiased estimate of t+45
   • Average revision between -0.05 and +0.05
   • No more than 66.7% of revisions in the same direction

2. Limited average absolute revision
   • Less than or equal to 0.10 percentage points of t+45
   • Less than or equal to 0.13 percentage points of t+65

3. Sufficient coverage
   • Account for 70% of value by t+29 deadline
Results and Assessment

- Participants produced 8 quarters with “Flash” methodology retrospectively and 8 quarters on a going forward basis: **total of 16 observations**
- These results evaluated against pre-determined quality acceptance criteria to evaluate feasibility of t+30 flash for Euro area and EU
Results and assessment

- Overall, results demonstrate pre-determined quality acceptance criteria are met for 16 test quarters
- Authors conclude it is feasible to produce a reliable estimate of European GDP growth at 30 days after the end of the quarter
Questions/comments

- How valid are conclusions based on overall aggregates for Euro area and EU?
  - How useful is one number? Were criteria applied to individual countries reporting? Revisions analysis for countries now publishing at t+30?

- Other quality acceptance criteria considered?
  - e.g., behaviour of revisions at turning points, US GDP quality index

- Why flash estimates of quarters and not monthly GDP?