

**26th MEETING OF THE COMMITTEE
ON MONETARY, FINANCIAL AND
BALANCE OF PAYMENTS STATISTICS**

Luxembourg, 26 - 27 June 2003

PART B - ITEMS FOR DISCUSSION

Item B.8.c of the agenda

Seasonal adjustment of quarterly national accounts
Progress report on implementation of CMFB recommendations

Seasonal adjustment of quarterly national accounts
Progress report on implementation of CMFB recommendations

1. This progress report has been prepared jointly by Eurostat and the ECB following the request formulated by the CMFB at its meeting in July 2002. The implementation plan was updated following the replies received from 14 EU countries (Luxembourg is not yet producing quarterly national accounts).
2. A further progress report together with an update of the implementation plan for EU Member States, including the 10 Acceding Countries, will be submitted to the CMFB for discussion on the occasion of its June 2004 meeting.

The CMFB is invited:

- **to take note of the progress report and to decide to include it in its web site;**
- **to agree on the procedure for the extension of the implementation plan to the future Member States.**

16 June 2003

IMPLEMENTATION OF THE CMFB RECOMMENDATIONS ON THE SEASONAL ADJUSTMENT OF QUARTERLY NATIONAL ACCOUNTS

- PROGRESS REPORT -

At its meeting on 4-5 July 2002 the CMFB welcomed the implementation plan of the Joint Eurostat/ECB task force on seasonal adjustment of quarterly national accounts.¹ The CMFB requested a progress report for January 2003. However, since a number of changes were due to be made for the adjustment in early 2003, this report was produced after most EU countries have released data for the first quarter 2003.

The report summarises the progress achieved, and remaining differences between national practices.² It is important that all EU countries work in the course of 2003 towards fully achieving the common CMFB recommendations. Countries which do not yet plan to adopt a recommendation by early 2004 are asked to review their planning in the light of the achievable EU-wide harmonisation. Finally, the CMFB recommendations on the seasonal adjustment of the quarterly national accounts should also be implemented by the Candidate Countries, in particular the Acceding countries.

1 Current data availability and method

Seasonal adjustment of (almost) the entire set of variables included in Table 1 of the ESA 95 transmission programme is performed by most EU countries. Major problems persist in those countries that recently started to compile them. Ireland has started to produce raw data and will apply the seasonal adjustment when raw series will become long enough (most data begin in 1997/1998). Greece and Portugal do not provide raw data to Eurostat, and derive seasonally adjusted accounts indirectly from adjusted indicators (temporal disaggregation of annual data). For Portugal, this includes most Table 1 variables, while for Greece only the GDP expenditure side is available. Greece will begin with the adjustment of quarterly raw data when it becomes available.

Regarding ESA employment data, Portugal will start producing them in the course of 2004 while for compensation of employees no precise dates are indicated due to a

¹ See 'EMU Action Plan on statistical requirements in stage three – Implementation plans for seasonal adjustment of quarterly national accounts', CMFB 02/07/C.1.b, July 2002.

² For the 14 EU countries which replied to the questionnaire sent to the CMFB on 30 May 2003 the information provided was used for this report. For Luxembourg, the information has not been updated compared to the CMFB document of July 2002.

reported lack of resources. For the same reason, Sweden gave no information when current prices series will be adjusted.

Regarding the use of X-12-REGARIMA or TRAMO-SEATS as recommended by the CMFB, France reported that the upgrade would be completed by 2005 (to X-12-REGARIMA most likely). For Finland (currently using X-11-ARIMA) a decision on the software to use will be made in autumn 2003.

2 Trading-day (and other) pre-adjustment

The most important progress was achieved by Italy, which has set up trading day adjustment of quarterly national accounts data and published seasonally adjusted and working day corrected data in June 2003. The procedure is in line with the CMFB recommendations (regression method based on monthly indicators). With the inclusion of Italy, the coverage of countries producing t.d.a. results increases to more than 90% of the EU and euro area for GDP and most components (for income/compensation data the share is lower, since in particular Germany and Italy are not adjusting for trading day effects).

Trading day adjustment is not made by: Finland, for which no plans are known yet; Greece and Ireland, because of the short length of their respective quarterly time series; Luxembourg which does not yet produce quarterly national accounts; and Portugal, due to a reported lack of resources.

All countries applying trading day adjustment use the regression method; countries which will do so in the future plan to use the regression approach as well.

Regarding the recommendation for the adjustment to be based on monthly indicators, this is done in almost all cases. Exceptions are Spain (conceptual reservations) and Austria (resources). In all countries, the method can only be used to the extent that appropriate monthly indicators are available.

The recommendation that no pre-adjustment effects other than trading day effects should be excluded from the final adjusted series is applied by all countries except the Netherlands which plans to align the national practice with the recommendation by October 2003. The recommendation was made in order to avoid adjustment for different effects across countries (e.g. extreme weather, strikes etc), which would undermine comparability.³

3 Seasonal Adjustment

Adjusted GDP data consistent with the components within the accountancy framework are available for all countries except those that already implemented the chain linking on constant price aggregates (Netherlands, Sweden) or will do in the near future (UK). A recommendation for the adjustment of chain-linked data has to await an EU-wide decision on quarterly chain linking of raw data.

Countries which produce adjusted aggregates and components with a discrepancy due to direct adjustment of all individual series accept to provide a separate discrepancy series for the checking of the consistency to Eurostat.

³ While these effects might be eliminated for the purpose of improving the estimation of the seasonal component, they should be put back to the final adjusted and published series.

The recommendation also referred to consistency with annual totals.⁴ This recommendation is not accepted and implemented by four countries (Spain, Austria, Sweden and UK).

4 Data transmission to Eurostat

The CMFB recommended the transmission of three data formats to Eurostat: raw data, trading-day corrected data and trading-day plus seasonally adjusted data. The need for the two adjusted formats is justified in order to be able to assess the impact of trading-day components.⁵ Raw and seasonally plus working day adjusted data are currently transmitted by those Member States already adjusting their QNA data (except Greece and Portugal for raw data, see before). Several Member States – Spain, France, Austria, Portugal, Sweden and United Kingdom – do, however, not support the transmission of trading day corrected data, because of resource constraints, conceptual reasons and practical organisation of the compilation process (no clear-cut distinction of different steps in the adjustment process). This prevents the derivation of separate trading-day adjusted European aggregates by Eurostat.

5 Accessing Countries, Bulgaria, Romania and Turkey

In view of the compilation and transmission of quarterly adjusted figures, Candidate Countries, and in particular Accessing Countries are asked to support and implement the recommendation of the Task Force (subject to the availability of appropriate raw series). Eurostat and the ECB will monitor the developments achieved in this area and will report back to the CMFB in the framework of the follow-up of the Action Plan for Candidate Countries. They will receive a more detailed documentation on the recommendations in July 2003.

⁴ According to this, the sum of four quarters of seasonally adjusted data should be equal to the sum of four quarters of raw data; and the sum of four quarters of seasonally and trading day adjusted data should be equal to the sum of four quarter of trading day adjusted data.

⁵ Instead of trading day adjusted data, trading day factors or purely seasonally adjusted data might be transmitted and could be used by Eurostat to derive trading day adjusted estimates.

Implementation plan for EU Member States (revised)

The 2002 plan was based on the recommendations of the CMFB and the Member States' replies to the questionnaire. The present revised plan contains further changes and updates to reflect changes, modifications, expected developments in national practices on the seasonal adjustment of quarterly national accounts. **It is proposed that all EU countries work in the course of 2003 towards fully achieving the common CMFB recommendations.** Countries, which are not yet planning to adopt a recommendation by early 2004, are asked to review their planning in the light of the achievable EU-wide harmonisation. Where implementation dates have been revised, the original target is shown in brackets.

4.1 Coverage of Table 1 of the ESA 95 transmission programme and software used

Coverage of Table 1 of ESA 95

Beginning 2004 Most EU countries will be able to provide all adjusted data as requested for the complete Table 1, including breakdowns and employment data.

[Beginning 2003] *Remaining issues:* Luxembourg, Portugal and Greece do not yet compile raw quarterly data, for Greece only the adjusted expenditure side is available. Ireland will begin adjustment when raw series are long enough. Sweden does not compile seasonally adjusted current prices figures yet. For Portugal, data on compensation of employees will still be missing for the time being.

Software in use

2005 [Beginning 2003] Most countries will make use of either X-12-REGARIMA or TRAMO-SEATS for seasonal adjustment. United Kingdom and France will upgrade the software in use in 2005, most likely to X-12-REGARIMA.

4.2 Trading-day (and other pre-) adjustment

Production of t.d.a. QNA

Beginning 2004 The share of countries producing t.d.a. data has increased significantly after Italy has started the production of t.d.a. results (June 2003).

[Beginning 2003] *Remaining issues:* Greece, Ireland and Portugal will start later, due to insufficient series length or unavailability of raw data or lack of resources. Denmark intends to implement in 2004. Finland postponed a decision to autumn 2003.

Use of the regression method for the adjustment

In place Accepted by countries already producing t.d.a. data and by countries which are going to start the production of this data.

Remaining issues: None.

Use of monthly indicators to derive t.d. factors

In place Accepted and already in place in most countries depending on availability of reliable and timely data.

Remaining issues: Spain and Austria do not accept the recommendation.

Pre-adjustment effects

In place Accepted by all countries. The Netherlands will align national practice in October 2003.

4.3 Seasonal adjustment

Consistency of adjusted GDP and components

Beginning 2004 Already in place in most EU countries. Denmark and Greece will comply respectively by end 2003 and beginning 2004.

[Beginning 2003] Consistency is and will be affected in those countries that already implemented or will soon implement a quarterly chain-linking of constant price data. This is already the case for the Netherlands and Sweden, and soon for the United Kingdom. The recommendation will be adapted in the light of the development of the methodological framework of quarterly chain-linking.

Consistency with annual totals

Beginning 2004 In many countries the constraint is already imposed. Ireland will conform on a later phase, due to insufficient series length.

[Beginning 2003] *Remaining issues:* Spain, Austria, Sweden and United Kingdom do not yet accept the recommendation.

Update of seasonal factors

In place All countries producing adjusted results already comply.

Remaining issues: None.

4.4 Transmission of adjusted results to Eurostat

Raw, seasonally adjusted and seasonally plus trading-day adjusted data

In place All countries already producing seasonally adjusted data accept transmission of raw and seasonally adjusted/seasonally plus trading-day adjusted data.

Remaining issues: The transmission of both purely seasonally adjusted and seasonally plus trading-day adjusted data, when trading-day adjustment is performed, is rejected by most countries for different reasons (conceptually and technically difficult when trading-day adjustment is performed).

Pure trading-day adjusted data

Beginning 2004 Accepted by eight countries, although in some cases limited to the transmission to Eurostat of factors for the adjustment (Netherlands).

Remaining issues: In Spain, France, Ireland, Luxembourg, Austria, Portugal and United Kingdom limited resources, conceptual difficulties and lack of internal users requests were mentioned as reasons for the rejection.

Residual series for discrepancy

In place In most cases, the indirect adjustment is made. No differences are observed in adjusted data. Countries which produce adjusted aggregates and components with a discrepancy due to direct adjustment accept to provide a separate series for the checking of the consistency to Eurostat.

Remaining issues: None.