

# Changes to the annual seasonal adjustment review

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*Since the deployment of X-12-ARIMA for its seasonal adjustment, the Bank of England has been conducting annual reviews and documenting the results in this publication. This article outlines a change in the annual cycle with the review being spread across the year as opposed to being concentrated in the first quarter. This change will take effect this year, with any major methodological changes continuing to be documented in either this publication or the statistical release in which the change is used. Non-seasonal series and a selection of seasonal series will continue to be reviewed based on both their diagnostic performance and importance.*

The Bank compiles and publishes seasonally adjusted time series for all of its principal data series that have identifiable seasonality. The X-12-ARIMA seasonal adjustment package was adopted in 2004<sup>1</sup> and an annual exercise reviewing series has been undertaken, with results presented in this publication. The annual review aims to identify whether, with the addition of an extra year of data, the existing options remain the most appropriate or whether different options could improve the seasonal adjustment of the series.

Currently series are reviewed each January-March using end-December data, with implementation generally carried out in time for the April edition of *Bankstats*. The review looks at all series that appear on the Bank's statistical releases: *Sectoral M4 and M4 Lending, Notes and Coin, Lending to Individuals, Housing Equity Withdrawal and Capital Issuance*. A selection of other series from *Bankstats* are also reviewed, the selection being largely based on X-12-ARIMA's diagnostic tests, which indicate whether an existing seasonal adjustment could be refined in some way.

An alternative way of reviewing the data set is to be implemented. The new approach will spread the series over the year, with the selection of series guided by statistical release type and consideration given to underlying aggregation structures as well as whether the current seasonal adjustment is satisfactory or not. Distributing the series across the year should assist in ensuring that the Bank can resource the annual review appropriately. The following table outlines the proposed three phase annual review for our data:

| Phase | Usual review period | Type of series covered  |
|-------|---------------------|---|
| 1     | Jan-April           | Broad money and credit, Notes and coin                            |
| 2     | May-Aug             | Balance sheet, Capital issuance, Housing Equity Withdrawal, Other |
| 3     | Sep-Dec             | Lending to individuals  |

Individual series will continue to be monitored and seasonal adjustment settings altered if considered appropriate. Any major methodological changes will continue to be explained in this publication or the statistical release in which the change is implemented.

## Implications for published series

Revisions that arise as a consequence of changes to seasonal adjustment settings will be available towards the end of the relevant review period. Up to now, revisions would typically be expected to be seen in April *Bankstats*.

The Bank of England intends to make this change with effect from the publication of March 2011 data, in *Bankstats* to be published on 4<sup>th</sup> May 2011.

<sup>1</sup> 'Change of seasonal adjustment method to X-12-ARIMA' by John Thorp, *Bank of England Monetary & Financial Statistics*, December 2003  
<http://www.bankofengland.co.uk/statistics/ms/articles/artdec03.pdf>.