Seasonal Adjustment in National Accounts:
a discussion on typical applications

Filippo Moauro
Marco Marini
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Marco Marini  
(mamarini@istat.it)  
ISTAT, Direzione Centrale Contabilità Nazionale

Filippo Moauro(*)  
(moauro@istat.it)  
ISTAT, Direzione Centrale Contabilità Nazionale

Abstract: The paper discusses the main issues arising in the application of seasonal adjustment of quarterly national accounts. It gives an overview of the main methodologies in use and it provides the results of two applications with a discussion on revision analysis, temporal disaggregation and the use of a multivariate approach.

In most European Countries seasonal adjusted figures of quarterly accounts are obtained through a sequential and indirect approach, since a direct quarterly measure is rarely available. Then, the implementation requires the use of a monthly or a quarterly related series, which is seasonal adjusted first and then used as regressor in a temporal disaggregation procedure where the dependent variable is given by the genuine annual measure.

In the first application the behaviour of revised seasonal adjusted estimates is analysed through a rolling forecasting experiment, with a comparison between the performances of X12Arima, Tramo-Seats and the recent development given by the seemingly unrelated approach, which enables adjustment and temporal disaggregation to be carried out simultaneously.

The second application concerns multivariate seasonal adjustment: a Sutse model is built for the Italian industrial production index and the electrical demand, and the stability of seasonal adjusted figures is compared with those obtained using an univariate approach.

Subject area: Applications of seasonal adjustment techniques in official statistics

(*) Contact Author.