Recent Developments in Benchmarking to Annual Totals in X-12-ARIMA and at Statistics Canada

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Abstract:

X-12-ARIMA will soon include a spec, called FORCE, to produce the table of seasonally adjusted series with constrained yearly totals. The method is based on a benchmarking methodology developed at Statistics Canada. In X-12-ARIMA, the control totals will be restricted to be derived from the raw series and the method will be driven by a few parameters. This paper gives the ideas behind the method and also gives guidelines for the selection of the parameters. We also present recent methodological developments toward the development of a more generalized benchmarking procedure, which generalizes the benchmarking method in X-12-ARIMA to include more options. For example, the input series does not need to be seasonally adjusted for benchmarking; control totals can be external, and so, a bias parameter can be estimated. Finally we conclude this paper with areas for further development. Through the paper, we will provide examples to illustrate the different cases.