

## C. Forecasting, back-casting and revising time series

### C. Forecasting, back-casting and revising time series

17.15. Not all sources supply data on a timely basis. For sources that do not, the compiler may have to extrapolate certain series. Compilers are advised to consult the *BPM6 Compilation Guide*, which explains a number of interpolation, extrapolation and forecasting techniques that range from the very simple, such as using the value from the previous period or same change as in the previous two periods, to more complex techniques that draw information from models, taking into account the seasonality in subannual series.<sup>[1]</sup> Such techniques can be applied to various types of statistics.

17.16. Similarly, historical statistics on the international supply of services are also important (e.g., for analysis purposes). Compilers are often asked to provide long time series, especially when new guidelines or data sources or a new compilation methodology is introduced. Since it is often difficult to collect source data on the new basis for a long historical period, suitable overlap periods and the stability of relationships over time need to be analysed to decide how far back in time the data can be revised. To generate series for earlier periods, techniques similar to those used for forecasting can be used, for example, by a constant (percentage) change, possibly accounting for seasonality.

17.17. Back-casting is also very important for providing long time series for new classifications on the basis on EBOPS 2010. A first step could be to use the EBOPS 2010 - EBOPS 2002 correspondence table,<sup>[2]</sup> taking into account that some new EBOPS 2010 classifications are not directly related to those based on EBOPS 2002 (such as manufacturing services). It may also be difficult to relate the two classifications if only main services aggregates are compiled, although some new recommended breakdowns can be derived from data for earlier periods on the basis of relationships between old and new classifications in a recent overlap period.

**Include page:** [Country experience: Australia \(Chapter 17\)](#)

**Next:** [D. Allocating to individual EBOPS items and trading partners](#)

---

[1] See for example the *BPM6 Compilation Guide*, para. 8.29 and 8.30.

[2] Available from <http://unstats.un.org/unsd/tradeserv/TFSITS/msits2010/annexes.htm>.