



# Handbook on Backcasting

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- Backcasting is a statistical technique employed to ensure the coherence of the time series across time while maintaining economic history of a country
- It differs from regular revisions as it deals with
  - Changes in the new international statistical standards
  - Changes in classifications
  - Changes in delineation of boundaries
  - Changes in concepts
  - Changes in data sources



- Motivation
- Scope of the Handbook
- Timeline



- Need to maintain consistent time-series of national accounts data
- Long time series are very important for analytical purposes and maintaining the economic history of a country
- Users require a time-series of economic data in order to undertake:
  - Monitoring and monetary and fiscal policy analysis
  - structural analysis (productivity, input-output or GE modelling)
  - forecasting and business cycle analysis
  - administrative uses
  - environment-economy linkages
  - Other research purposes



- Provide guidance on backcasting techniques to maintain coherent timeseries
- Address the technical, the planning, and the management aspects of a backcasting project:
  - the design and management of a backcasting process
  - different methodological approaches and techniques for backcasting
  - quality assurance
  - communication



- Occasional “Big bang” type of revision  
Large in scope but done infrequently (e.g. 10-15 years)
- Occasional “Strategic” type of revision  
Scope carefully chosen to incorporate the most important changes. These revisions done more frequently (e.g. every 5 years) according to a planned process of evaluation and review
- Flexible “Strategic” type of revision  
Limited in scope but done frequently



- There are some important considerations and constraints national accountants face when backcasting National Account time series. These include:
  - Time
  - Human resources
  - Legislative / administrative uses of the data
  - Coordination (e.g., integrated accounts, decentralized accounts)
  - Availability of source data and quality of source data
  - Significance of the changes to be backcasted

The approach chosen in large part is determined by the above factors



# Setting the scope of revisions

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- Which accounts to produce on an ongoing basis (and which to backcast)
- Which variables to backcast
- What types of revisions (e.g. classification changes, boundary change, valuation changes, etc.)
- What time frame need to be updated
- How far back can the backcasting be done





# Framework to plan backcasting

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Revision time frame	2017-2012	1990-2011	1960-1989
<b>Source data availability</b>	Detailed data available	Only published data exists	High-level aggregate available
<b>Proposed backcasting method</b>	Bottom up compilation	...	...
<b>Impact by type of accounts</b>	...	...	...
<b>Quality outcome</b>	...	...	...
<b>Quantification of change</b>	...	...	...



- The results must present a plausible picture of the macro-economy over the entire time frame
- Evaluation includes:
  - Statistical and analytical verification of the individual backcasted series
  - Statistical and analytical verification of the balancing items
  - Revision analyses in levels and growth rates of key variables



- Importance of good documentation of the project process, methodology and results
- Communication with users/stakeholders is fundamental



- Currently finalizing the first complete draft
- 3<sup>rd</sup> /4<sup>th</sup> Quarter 2018 – Expert Group review of the draft
- Early 2019 – Global Consultation
- 2<sup>nd</sup> half 2019 – Finalizing the handbook



Thank you!