

## Seasonal Adjustment for the Flow of Funds Accounts Data

June 27, 2022

Bank of Japan

Research and Statistics Department

In the Flow of Funds Accounts (FFA), the Bank of Japan releases seasonally adjusted quarterly figures of financial surplus or deficit in four major sectors (private nonfinancial corporations, general government, households and overseas). Following the retroactive revisions in the FFA, we have selected the most suitable ARIMA models applied for individual series. Details of the seasonal adjustment method are as follows.

1. The Bureau of Census X-12-ARIMA method, version 0.3 is used.
2. The additive model is adopted for each series. The critical values for additive outliers and temporary changes depend on the length of the time-series data.
3. Quarterly financial surplus or deficit of each sector for the period: Q2 2005-Q4 2021 are used. For the quarters after Q4 2021, seasonally adjusted figures are calculated by applying the predicted seasonal factors.

Sector	ARIMA model	Level shift and ramp
Private nonfinancial corporations	(011)(011)	None
General government	(011)(011)	None
Households	(110)(111)	None
Overseas	(010)(011)	None

Inquiries:

Financial Statistics Group, Economic Statistics Division, Research and Statistics Department

E-mail: [post.rsd5@boj.or.jp](mailto:post.rsd5@boj.or.jp)