Methodological annex n°16 : Quarterly national accounts switch to 2020 benchmark

Warning: This annex will be updated in September 2024

In May 2024, national accounts changed their "benchmark" year to 2020. Each year, the estimated growth in macroeconomic aggregates is updated over the last three years to take into account new information available since the previous publication. On May 31, 2024, all the aggregates since 1949 were modified.

In alignment with the annual national accounts, the quarterly national accounts also changed their "benchmark" year and took this opportunity to revise their policy on quarterly series revisions. Additionally, the quarterly accounts made methodological adjustments as part of the benchmark revision.

A change in policy for revising quarterly accounts

The quarterly accounts serve a dual purpose: to describe economic fluctuations on a quarterly basis to better understand events and to quickly provide a macroeconomic description of the present using current data, well ahead of annual estimates. The construction of the French quarterly accounts is thus based on the calibration-adjustment method:

- The calibration[1] method transforms the current data to bring them closer to the definition and scope of the corresponding annual accounts series ;
- The adjustment ensures complete consistency between the quarterly accounts series and the annual accounts. This means that the sum of the four quarters of each year for each series must equal the annual amount.

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[1] Calibration is an econometric relationship between an indicator (I) and an account (C), estimated over a given period. For more details, see Insee méthodes No. 126.

Thus, in the event of a re-estimation of the annual accounts, the quarterly accounts are necessarily revised. They are revised for the years covered by the revision of the annual accounts, as well as for previous years, through the calibration relationships.

In the 2014 benchmark, each quarterly publication led to a re-estimation of the 1978 accounts up to the present date. Although the quarterly profile of the series was fixed over the period 1949-1978, this profile was reviewed at each publication over the period 1979 to the last estimated quarter [► Figure 0-1].

Revisions of the quarterly profile, excluding adjustments to annual accounts once a year, are linked to:

- replacement of extrapolations by indicators initially unavailable ;
- revisions of gross indicators for the last quarter or previous quarters;
- revisions of seasonal adjustments.

While these profile revisions are relevant for recent quarters and ensure the intertemporal consistency of the series, they seem less appropriate for the estimation of quarters dating back more than forty years.

Figure 0-1 : Revisions of GDP in volume between the detailed results and the first estimate - 4th quarter of 2023 in euros (millions)
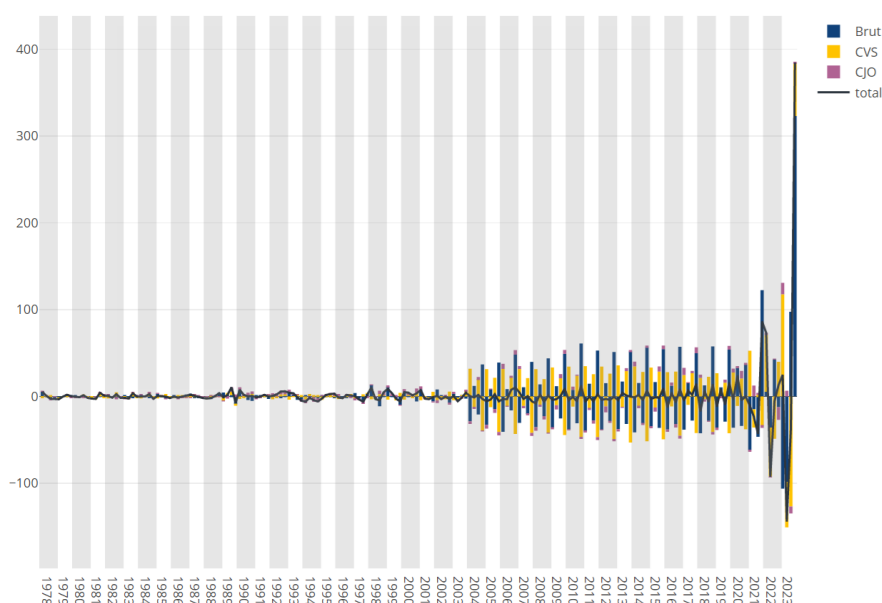
Source : Insee, national accounts, 2014 benchmark

Similarly, as mentioned above, once a year, the adjustment to the annual accounts (provisional, semi-definitive, and definitive accounts) results in revisions up to 1978 due to the updating of benchmarking models. For the 2020 benchmark, it was decided to update this revision policy:

- From 1949 to 2000, the quarterly profile is fixed in the 2020 benchmark[2] ;
- From 2000 onwards, the quarterly profile is re-estimated with each publication. Thus, starting with the first estimate of Q2 2024 at the end of July 2024, no further quarterly revisions will be observed for quarters prior to the year 2000, except for future benchmark revision. This modification applies to the series published on the Insee website as well as those communicated to Eurostat.

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[2] To be more precise: (1a) From 1949 to 1978, the estimation is fixed in the 2020 benchmark, estimated from the 2014 benchmark at the A17 level of the nomenclature ; (1b) From 1978 to 2000, the estimation is fixed in the 2020 benchmark, estimated from the 2014 benchmark at the F48 level of the nomenclature.