



2020 revision of the National Accounts: main changes and structural and economic effects

28 September 2020

Introduction

The National Accounts (NA) undergo regular revisions to ensure that they reflect the reality of a country or region as accurately as possible at all times. To this end, new and more up-to-date data is integrated each time and the concepts and methodology used are adapted in line with the latest developments. At international level, these revisions are coordinated in the area of macroeconomic statistics. A revision is recommended every five years in order to define a new baseline year (a “benchmark” revision). A revision of the concepts used should also be undertaken every ten¹ years.

The 2020 revision² of the NA is one such benchmark revision. It aims to use new source data or revised data to ensure the necessary coverage, structure and consistency between use and production³ and thus define a new baseline year. It concerns the annual NA statistics produced by the Federal Statistical Office (FSO) as well as the quarterly results published by the State Secretariat for Economic Affairs (SECO), which are based on the FSO’s data. The revision affects all institutional sectors and all items of the NA that are reported collectively.

Below is a description of the main changes⁴ followed by a brief explanation of the structural and economic effects on gross domestic product (GDP).

Main areas subject to revision

The main changes concern two areas: the revision of the methods and data sources used and improvements to coverage and completeness. Full coverage of all economic activities is a key component of the NA’s quality. Achieving this completeness is hard, as some economic activities such as illegal and informal production can only be tracked with difficulty. Gaps in the administrative data and statistics available are another potential cause of incomplete coverage.

With this revision, however, the NA are taking a step forward in this regard by focusing on illegal activities and patchy coverage as well as on the imbalance between production and use.⁵ The new calculation methods and data have now enabled the initial estimation of illegal activities done in the wake of the 2012 revision of the NA to be overhauled. Using a statistical model, it has also been possible to take better account of small businesses in the surveys of companies.

During the revision, great emphasis was placed on double-entry bookkeeping (two parties involved), i.e. recording production and use separately, to make sure that the NA were internally consistent. Another

¹ Revisions of the National Accounts: <https://www.bfs.admin.ch/bfs/en/home/statistiken/volkswirtschaft/volkswirtschaftliche-gesamtrechnung.assetdetail.9186419.html>

² The National Accounts for most European countries were revised in 2019. In Switzerland, this revision was postponed to 2020 in order to wait for the latest developments in a number of fundamental statistics. Switzerland will follow the recently agreed international timetable from 2024 onwards.

³ Within the NA, all goods manufactured or imported (production) are either consumed, invested or exported (use).

⁴ Cf. the 2020 revision of the National Accounts: main changes and effects, FSO Neuchâtel 2020.

⁵ The revised data on the tourism balance of payments was published on 7 July 2020. <https://www.bfs.admin.ch/bfs/en/home/statistiken/tourismus/monetaere-aspekte.assetdetail.13127047.html>

important task was to harmonise the various banking commissions so that all elements of banking sector production were also included on the expenditure side.

As mentioned in the introduction, this revision of the NA is intended to integrate the most recent methodological developments and the latest and most relevant data required to update the figures so that a new baseline year can be defined. All institutional sectors and all items reported collectively are affected. The work has impacted on the following collectively reported items in particular.

A new data pool based on merged data from the 2016, 2017 and 2018 Household Budget Surveys (HBS) enabled the new baseline year of 2017 to be **calculated in respect of final consumption by private households**. With this new pool, spending can be redefined on a more detailed, more robust and more representative level. In addition, the estimate of data at constant prices now distinguishes between spending in Swiss francs and purchases in foreign currencies, meaning that adjustments made for inflation take account of the price trend outside Switzerland as well as exchange rates.

The trade and transport margins used to estimate **investment in equipment** were adjusted in collaboration with Germany's Federal Statistical Office (Destatis). Prior to the revision, **investment in construction** was based solely on administrative data. As this data only accounts for the construction expenditure required for a building permit, however, it has been supplemented using the 2014 input/output tables.

The **non-profit institutions serving households (NPISH) sector** has been completely overhauled. The makeup of costs was recalculated based on a representative random sampling of all entities in the sector, and the various collectively reported items were then estimated using NPISH payroll figures derived from old age and survivors' insurance (OASI) data. Another new feature in the NPISH sector is the fact that the **sequence of accounts** is now reported separately and independently of the household sector.

Unlike the concepts used in the NA, the banking statistics employed by the Swiss National Bank (SNB) include the foreign branches of Swiss banks. The subtraction method used for activities abroad has been reworked in order to take account of the restructures in the banking sector in the past few years.

The **tourism balance of payments**, which is an integral part of the NA, has likewise been completely overhauled.

Changes to the methodology used for the quarterly data

The methods used to calculate the quarterly national accounts (QNA) are essentially remaining unchanged. The data for the full year is translated into quarterly figures using appropriate indicators and econometric methods ("temporal disaggregation"). The adjustments to the full-year figures are reflected in the quarterly data and also result in changes to the calculation method in some cases. The econometric approach has been scrutinised in detail and revised as required. In a number of cases, this translation into quarterly figures now uses alternative or additional indicators that align more closely with the adjusted full-year data. The calculations are also underpinned by a wider pool of data where possible.

As regards production, the GDP calculation is now based on more sectors and a wider pool of data in both the industry and the service sector. For the manufacturing industry (General Classification of Economic Activities (NOGA) 10-33), value added in Switzerland's highly important chemical and pharmaceutical sector (NOGA 19-21) is calculated and reported separately. Value added in the sectors of energy and water supply, sewerage, wastewater management and remediation (NOGA 35-39), which had previously been reported collectively, is now broken down into two sections: energy supply (NOGA 35) and water supply, sewerage, wastewater management and remediation (NOGA 36-39). As regards the wholesale and retail trade (NOGA 45-47), value added in the retail trade (NOGA 47) is now published separately. Finally, value added in the entertainment sector (NOGA 90-96) has been broken down into two sections: entertainment in the narrow sense (NOGA 90-93) and other service activities (NOGA 94-96). The calculation of value added in these sectors has been revised accordingly, resulting in adjustments to the items hitherto reported collectively, including GDP.

In addition to the data from 1995 onwards required under the European System of Accounts (ESA) 2010, SECO also publishes time series from 1980 onwards for the most important items reported collectively. These time series are based on back calculations, which likewise had to be adjusted following the extensive revision of the data from 1995 onwards. New historical data was integrated where possible, including figures on the balance of payments that had been newly extrapolated retrospectively. Finally,

the adjustments made to all time series to account for seasonal effects were analysed in detail and amended where required.

Effects on the items reported collectively (in structural terms)

In the period from 1995 to 2017, the changes to the calculation methods and underlying data result in an increase in GDP of between 2.8% and 3.6% depending on the year (cf. Chart 1).

The increase amounted to 3.6% in the baseline year, 2017. On the demand side (cf. Chart 2), the adjustments to investments account for some 69% of the rise in GDP (increase in investments of around 10% across the board). The remaining 31% is explained by changes in the calculation methods and the incorporation of new statistical information (revised results for the balance of payments, updates to final consumption by private households, etc.).

The main changes on the supply side are due to the inclusion of companies with fewer than three employees and the harmonisation of the various banking commissions. These changes account for some 76% of the rise in GDP. However, the structure of the Swiss economy is largely unaffected (cf. Chart 3). The remaining 22% is due more or less exclusively to methodological adjustments in the financial institutions sector.

GDP at constant prices is often used as a benchmark to calculate data such as the government spending ratio or the household or government debt-to-GDP ratio. These figures are permitted to fall slightly unless their numerators are also affected by the revision.

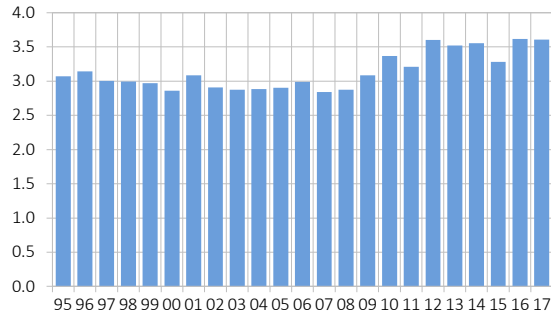
Effects on the QNA (in economic terms)

The effects described above for the full-year figures are also reflected in the various quarterly series. The biggest changes in absolute terms concern the growth rates for the investment components as well as the foreign trade components. There have been slight upward adjustments in GDP growth rates at the current margin as well as some adjustments over the whole time series (cf. Chart 4). In terms of the economic cycle, however, the interpretations for all time series remain largely unaffected.

2024 revision

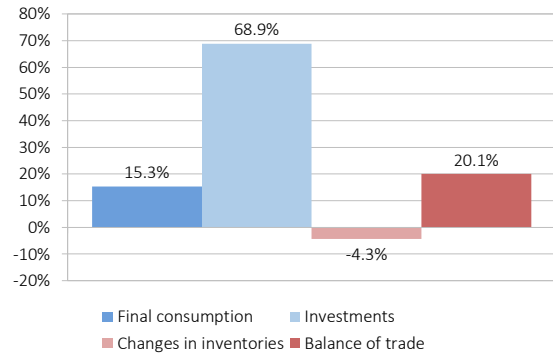
At international level, the next comprehensive revision of the NA is scheduled for 2024, and Switzerland has already begun working towards this. The next revision will focus on issues related to measuring globalisation and digitalisation. The Swiss-specific topics addressed in the latest revision (coverage, consistency, statistical methods and sources, etc.) will also be tackled once again

Chart 1: Increase in the nominal GDP level change compared to data before revision, in %



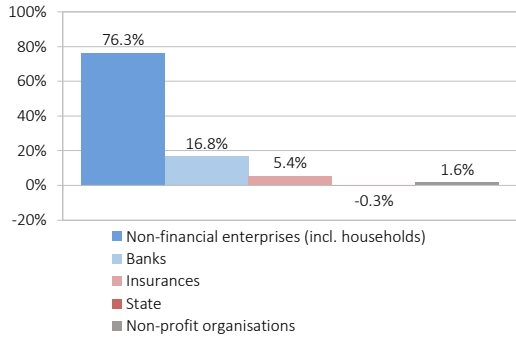
Source : FSO

Chart 2: Contributions to the level shift in nominal GDP 2017



Source : FSO

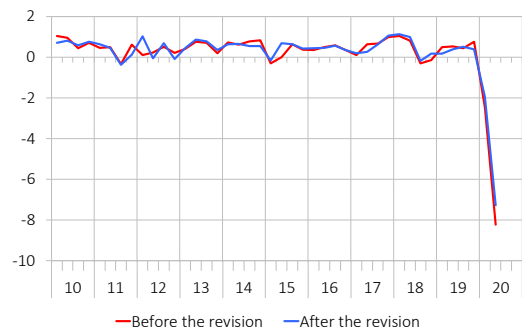
Chart 3: Contributions to the level shift in nominal GDP 2017



Source : FSO

Chart 4: GDP growth

Real, seasonally adjusted, compared to previous quarter



Source : SECO

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