

Short information on the Swedish national accounts

The Swedish national accounts are based on a UN-recommendation, A System of National Accounts. All the big international organizations, UN, OECD, EU, IMF and the World Bank are supporting SNA 93. The EU has its own application of SNA, called ESA 95. The Swedish national accounts according to SNA 93/ESA 95 was published for the first time 27 May 1999. Several changes were then introduced compared to the former national accounts (SNA 68): new classifications, changes in definitions, revised sources, new methods for calculation and method for calculation of constant prices.

Revisions

Three major revisions have been performed since 1999. The results of the first one were published on 5 December 2002 and the results of the second one were published on 29 November 2007. The third revision was released on 6 May 2010. The time-series start with 1993. Some main aggregates are available for earlier periods.

When a new quarter is published revisions are normally made of the previous quarters of the same year. Also when the first quarter of a new year is compiled, revisions of the previous year may be performed. Working-day and seasonally adjusted estimates are revised for the whole period from 1993 and onwards at every new quarterly release.

According to a decision by Eurostat Statistics Sweden have changed the institutional sector of the Premium pension scheme on 1 March 2007. The premium pension scheme in the National Accounts is now part of the financial corporation's sector. The Premium pension scheme is a defined contributions funded pension scheme administrated by the Premium Pension Authority (PPM). Such pension schemes shall not be included as part of the government sector in the reporting to Eurostat of government deficit and debt. PPM shall instead be classified as an insurance corporation owned by the central government, and having an outstanding pension debt against households.

The release of National Accounts (NA) for the 4th quarter 2006 included the sector reclassification of PPM. The changed treatment had impact on the accounts from 1995 and onwards. On 29 March 2007 the new accounting of PPM was introduced in the financial accounts. The reclassification is from 29 November 2007 also introduced in the annual accounts and in the regional accounts from 19 December 2007.

Method of calculating constant prices

SNA/ESA recommendations are adopted for calculation of values at constant prices, where the price level of the preceding year is used. The advantage of this method compared to the method used earlier - with a fixed base year - is

that the different components are weighted together using latest possible information and no part of the system will have wrong weights due to changed price relations. For presentation of the constant prices which are calculated at different price levels the figures are chained to the price level of a common year. The Swedish national accounts are now presented at constant prices in the latest calendar year's prices. **With reference year prices the different components and aggregates are not additive except for the reference year and the immediate following year.** Each different time series must be calculated separately.

Working-day and seasonal adjustments

Working-day and seasonal adjustments are integrated and made in Tramo/Seats, a computer software recommended by Eurostat. Working-day adjustment of value added and employment is made in two steps. First the number of working days quarterly is calculated. Production is assumed to take place during five days a week.

A ratio between the weighted number of working days an average quarter and the selected quarter is calculated. The proportional effect calculated from the calendar is used in the regression model for the variable to adjust for seasonality. The working-day adjustment is then estimated as a part of the model. For most variables this treatment gives a smaller calendar effect than if it was calculated proportionally. Each variable has a dedicated model for seasonal adjustment and all models are revised, based on new quarterly information available after the calculation of annual accounts in November. GDP as well as consumption and investments are working-day adjusted in this way. However, no table on GDP from the expenditure side that is only working-day adjusted is published. The seasonally adjusted data contains also the working-day adjustment.

Seasonal adjustment is a method to make analysis of time series less difficult. The results may differ depending on the chosen method and input parameters to the model. Also the results for the latest period have a tendency to be considerably adjusted in the accounts when succeeding quarters are calculated. Working-day adjustment is not made on the annual figures so quarterly data cannot be expected to sum to the annual figures.

Documentation

Documentation of the quarterly accounts is available on SCB's web site.

National Accounts and primary sources

Several of the sources used in the National Accounts (NA) are also published in their own names, which sometimes seem to correspond to partial aggregates in the NA. However, annual and quarterly trends and level estimates often deviate from results in the NA for various reasons. Explanations to some of the differences between NA's estimates and the results from primary sources are given below. Timeliness and revision policy may differ.

In the national accounts system consolidation is made between estimates from different surveys and other sources in the balancing procedure between the supply and use sides. This process can lead to adjustments of the results for the various partial aggregates. Information on primary statistics is also often disseminated much earlier than the NA's estimate for the same area.

Mining and manufacturing industry production

The NA extrapolates the short-term industrial production estimates to the most recent definite annual value added calculations. No such annual adjustment is done for the Industrial Production Index (IPI).

The NA presents figures in current and constant prices - IPI is presented only as an index and covers mainly deliveries that the NA corrects with changes in inventories.

The NA includes the entire population while the IPI mainly only includes firms with at least 10 employees.

The direct publishing of the IPI concerns calendar-adjusted and seasonally adjusted monthly data. Calendar-adjusted quarterly information is also published. The NA publishes actual and in some cases working-day adjusted and seasonally adjusted estimates.

Exports/imports

The guidelines for compiling exports and imports in the NA are basically in agreement with that of the Riksbank's presentation of the balance of payments, BoP. The same source material is used in both cases. However, there are some differences in the treatment of parts of the material, which lead to different results regarding net exports in current prices. Constant prices are only compiled in the NA. Different results may also periodically be available because of differences in revisions policy.

The NA estimates diverge from ESA95 regarding the valuation of exports and imports- fob/fob and fob/cif respectively. Invoiced values are now used in the NA. The net export value based on invoiced values give different estimates compared to the estimates previously compiled for export fob and import fob.

A new sample and collection methods for the BoP estimates from 2003 and onwards resulted in a new level for foreign trade of services. These estimates were introduced on 29 Nov 2007, also in the NA and are now in accordance with the BoP. However, there are still differences regarding the border line between goods and services. This is due to the product specification (SPIN 07), which the NA is based on. Some estimates of services are for the time being not included in the BoP, i.e. financial services.

Household final consumption expenditure

The information for household final consumption expenditure is collected from a vast number of different sources such as registers, retail trade statistics, household budget surveys, production data, foreign trade and diverse questionnaires. The NA uses the most of the potential information. The main sources for quarterly calculations are turnover statistics including the motor vehicle industry, the wholesale and retail business and most of other service industries. These statistics provide a basis for about 50 percent of household final consumption expenditure. The Retail Trade Index has been produced in cooperation with the Swedish Research Institute of Trade since 1 June 2003. This index is published monthly and only includes retail trade, thus covering about 30 percent of household consumption expenses.

Consumption for dwellings comprises the largest sub-item in household final consumption expenditure and is calculated from the information on the number of completed apartments and one- or two-dwelling buildings during the period. The volume is reflatd with the rental price index to obtain values in current prices. Since energy consumption is presented as a separate item in household final consumption expenditure, it is deducted from consumption expenditures for dwellings, which thus corresponds to rent excluding heating expenses.

Household final consumption expenditure should cover only Swedish households. Expenditures in Sweden as well as abroad should be included. Detailed information on which goods and services Swedes have consumed while being abroad and what foreign visitors have consumed while visiting Sweden is not available however. The information is based on money exchange and Swedes' expenditures abroad is added and visitors' expenditures in Sweden is withdrawn as a lump sum at the end of the tables showing household expenditures.

Gross fixed capital formation

The quarterly source for most of the information for investments of market producers and producers for own final use is the Investment Survey. However, it does not include all the information needed for the National Accounts. For instance, the survey does not cover all industries, and the smallest companies are not included in the survey. In addition, information on vessels, aircraft, computer software, holiday homes, dwellings and financial leasing is missing or inadequate. In all of these cases, supplementary information is included from other sources. Concerning investments in the central government sector, information from the National Financial Management Authority is mainly used. Quarterly questionnaires are used for the primary municipality calculations and county councils calculations.

Changes in stocks

Comprehensive changes in inventory are only presented in the NA. Specific release of information on inventory outside of the NA only occurs for the mining and quarrying industry, the manufacturing industry and trade. Other information is only produced for the needs of the NA. Information on inventories published outside the NA is based on sample surveys that completely exclude small companies. The NA also includes a correction item in investments in inventory that occur when reconciling quarterly figures for use and supply. Summed up over the entire year, this correction item is zero in current prices and the prices of the previous year.

Labour input

The main source for calculating the labour input for the total economy in National Accounts (NA) is the Labour Force Survey (LFS). In NA the development of the average number of employed and total hours worked in the economy corresponds by and large to the development in LFS for the entire calendar year. However, deviations may occur for specific quarters. For estimations of industries and institutional sectors, the Short-term employment statistics and Short-term statistics for wages and salaries regarding private, municipal, county council and central government are also used.

Compared to the data published by LFS, there are some differences. The LFS data on hours worked refer to the average hours worked per week during the quarter. For NA purposes however, an adapted data set with quarterly volumes of hours worked is received from LFS. Besides the employment published by LFS, the labour input in NA also contains a deduction for persons registered in the population records for Sweden, but employed abroad, and their hours worked. These adjustments are made on the basis of LFS data. The detailed annual NA deviate from the LFS in several additional areas.

Wages and salaries, employers' social contributions and payroll taxes

Monthly tax declarations from companies form the basis of calculations for quarterly figures on wages and salaries in the NA. Administrative data from the Tax Authority is processed at Statistics Sweden and forms a statistical product. Calculation of gross wages by industry is made using the information available in LAPS, which is a comprehensive report including gross pay, payroll taxes and preliminary tax from employers' monthly tax returns. Definite yearly values in the NA have been calculated by using individual based information collected by tax authorities (LSUM) broken down by quarter and by industry using information according to LAPS. Information on total payroll taxes is available in the material collected by The Swedish National Financial Management Authority.