

# QUALITY REPORT

## Population by Labour market status (BAS)

Final statistics based on monthly data

**Subject area**

Labour market

**Statistical area**

Employment and working hours

**Product code**

AM0210

**Reference time**

2022 month, quarter and year

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## Quality of the statistics

### 1 Relevance

#### 1.1 Purpose and information needs

##### 1.1.1 Purpose of the statistics

The purpose of Population by Labour market status (BAS) is to provide information on the supply of labour in Sweden on a monthly, quarterly and annual basis. BAS disseminates statistics on, among other things, the number of employed, unemployed and persons outside the labour force for the registered population aged 15 to 74. The statistics can be used to describe the current status as well as developments over time. It highlights the whole population as well as smaller groups, such as detailed age groups at municipal level.

##### 1.1.2 User information needs

BAS can be used as a basis for analysis, studies, research and policy decisions in the field of labour market and economic development. For example, statistics describing the labour market's current status and development are an important basis for the production and analysis of macroeconomic forecasts. At the national level, the statistics can be used by, for example, government ministries, the Riksbank, the National Institute of Economic Research, banks and financial institutions. The statistics can also be used at the highly detailed regional level, and the users of the statistics may include the Swedish Association of Local Authorities and Regions as well as individual municipalities and regions.

#### 1.2 Content of the statistics

For monthly reference times, statistics are disseminated on the number of persons by labour market status, with the statuses 'employed', 'unemployed', 'students', 'retirees', 'sick' and 'others'. 'Employed' and 'unemployed' together constitute the labour force, and the remaining statuses are outside the labour force. There are also target characteristics expressed as proportions:

- *employment rate*, which is the number of people employed as a proportion of the population,
- *percentage of population in the labour force*, which is the number of people in the labour force as a proportion of the population,
- *unemployment*, which is the number of unemployed as a proportion of the labour force.

For the quarterly and annual reference times, the number-type target characteristics are defined as averages of the corresponding target characteristics per month.

### **1.2.1 Unit and population**

Based on the needs of users, the main population of interest is all persons who have been long-term residents in Sweden during the reference time, i.e., during the month, quarter or year in question, depending on the reference period.

The target population for a specific reference month consists of all persons aged 15-74 who would be registered in the population records in Sweden during the month, if the laws, regulations and rules governing civil registration are properly observed. The target units are persons, while the observation units are records linked to personal identification numbers in administrative registers.

### **1.2.2 Variables**

The target variable of BAS is labour market status, which shows whether a person is employed, unemployed, studying, retired, sick or other. These statuses can be aggregated into the categories labour force or non-labour force. A person belonging to the labour force has one of the statuses 'employed' or 'unemployed', while 'non-labour force' is constituted of those with the statuses 'student', 'retiree', 'sick' and 'other'.

The target variable is defined on the basis of the period month, which means, for example, that a person who has been employed at some point during the month is described as employed. The definition of labour market status is hierarchical, entailing that a person can only have one labour market status. For example, the labour market status 'unemployed' is obtained if the person has been unemployed at some point during the month without being employed. Similarly, subsequent labour market statuses are defined hierarchically, which means, for example, that a person has the labour market status 'student' when he or she has been a student but not employed or unemployed.

The observation variable 'labour market status' also has six categories: employed, unemployed, student, retiree, sick and others. Moreover, like the target variable, it is defined in corresponding hierarchical order and by the period month. The classification of labour market status is done in two stages, which together constitute the definition of the observation variable 'labour market status'. The second stage of this classification only concerns those persons classified as 'other' under the first stage.

The first stage in the classification consists of:

### employed

A person classified as 'employed' fulfils at least one of the following criteria:

- has during the month received earned income that is the basis for employer contributions according to the Swedish Tax Agency's monthly pay as you earn income tax return at the individual level (the PAYE return).
- has received, during at least one of the eleven months preceding the reference month, earned income that is the basis for employer contributions according to the PAYE return. In addition, they have received benefits from the Social Insurance Agency referring to an activity that occurred at least one day per month in all subsequent months up to and including the reference month. The benefit from the Social Insurance Agency must be of the type parental allowance, temporary parental allowance, prenatal allowance, sickness benefit, rehabilitation allowance, work or occupational injury benefit, benefit for care of closely related persons, disease carrier allowance or compensation for a risk group.
- is assumed to operate an enterprise during the month as a sole trader, trading partnership or limited partnership, and the enterprise is included in Statistics Sweden's Business Register. Assumptions are based on preliminary income tax returns and monthly F-tax payments reported by the individual to the Swedish Tax Agency as well as the current status of VAT accounting. This means that the person has appeared in the register and is considered active, or that the enterprise has paid earned income that is the basis for employer contributions according to the PAYE return to at least one person who is not responsible for the enterprise.
- has declared a business in an income tax return and appendix NE (sole trader) or N3A (trading partnership or limited partnership) to the Swedish Tax Agency for the reference year to which the reference month belongs. The enterprise must also have a positive turnover in the reference year and a known start date. Alternatively, the enterprise has zero turnover and a start date no earlier than one year before the reference month.

### unemployed

A person classified as 'unemployed' has, at some point during the month, been registered as unemployed with the Swedish Public Employment Service as openly unemployed, or as an applicant in a programme with an activity grant. 'Openly unemployed' and 'applicant in a programme with an activity grant' are defined according to the Swedish Public Employment Service's definitions for the current reference month.

In addition, the labour market status 'unemployed' is only obtained if the person is aged 16-64 on the last day of the month and has not been classified as employed.

### students

A person classified as a student fulfils one of the following:

- has received payment from the Swedish Board of Student Finance of study grants, study allowance, student finance for transition and retraining or education entry grants, which refers to an activity that took place during at least part of a week included in the reference month.

- has received activity benefit from the Social Insurance Agency for extended schooling, which refers to an activity that took place for at least one day of the month.
- has been enrolled in basic higher education or in municipal adult education (Komvux) at some point during the month.
- is 15 years old or, in most cases, 16 years old on the last day of the month.<sup>1</sup>

In addition, the labour market status 'student' is only obtained when the person has not been classified as employed or unemployed.

#### Retiree

A person classified as 'retiree' has, according to information from the Swedish Pensions Agency, received payment of an income pension, supplementary pension, guarantee pension, premium pension, or housing supplement and maintenance support for the elderly if the person is at least 65 years old, which refers to an activity that took place on at least one day in the reference month.

In addition, the labour market status 'retiree' is only obtained if the person is not classified as being employed, unemployed or a student.

#### sick

A person classified as 'sick' has received payments from the Social Insurance Agency of sickness allowance, activity compensation (not for extended schooling), sickness benefit, rehabilitation allowance, work or occupational injury sickness benefit, disease carrier allowance or compensation for a risk group, which refers to an activity that took place on at least one day in the reference month.

In addition, the labour market status 'sick' is only obtained if the person is not classified as being employed, unemployed, a student or a retiree.

#### other

A person classified as 'other' has not been classified into any of the labour market statuses of employed, unemployed, student, retiree or sick.

The second stage of the classification only concerns those persons classified 'other' under the first stage of the classification. The second stage of classification consists of:

#### employed

A person classified as 'employed' fulfils at least one of the following criteria:

- has, at some point during the reference year, received payments from employers in Denmark, Finland, Iceland or Norway constituting earned income for work that is the basis for employer contributions according to

<sup>1</sup> This does not apply to the reference months of July and August. Whether a 16-year-old is affected is determined based on the regulations for when payment of the Social Insurance Agency's child allowance is replaced by payment of student finance by the Board of Student Finance.

the PAYE return. This is according to information that the Swedish Tax Agency has received from the tax authorities in those countries.

- has during the reference year received earned income for work that is the basis for employer contributions and which has been reported to the Swedish Tax Agency in a statement of earnings and tax deductions filed by the employer.
- Has declared qualified holdings in a closely-held company (form K10) to the Swedish Tax Agency during the reference year to which the month refers, or was registered as beneficial owner of an enterprise in the Swedish Companies Registration Office's register of beneficial owners during the month. The person must also be a board member, managing director or chairman of the enterprise during the month according to the Swedish Companies Registration Office's register of representatives, and the enterprise must also have a turnover during the reference year as well as being active in Statistics Sweden's Business Register during the reference month.

In addition, the labour market status 'employed' in the second classification stage, is only obtained if the person has been classified as 'other' according to the first stage of the classification.

#### retiree

A person classified 'retiree' is aged 55 or over and, according to information from the Swedish Tax Agency, has received a payment of occupational pension, private pension or foreign-taxed pension during the year.

In addition, the labour market status 'retiree' in the second classification stage, is only obtained if the person has been classified 'other' in the first stage of classification and has not been classified 'employed' according to the second stage of the classification.

#### sick

A person classified 'sick' has, according to information from the Swedish Tax Agency, received compensation from sick pay and disability insurance for workers and disability pension due to a pension insurance during the year.

In addition, the labour market status 'sick' in the second classification stage, is only obtained if the person has been classified 'other' in the first stage of classification and has not been classified 'employed' or 'retiree' according to the second stage of the classification.

### **1.2.3 Statistical measures**

The summary measures that appear in the statistical target characteristics for the reference month are number and proportion, which are special cases of the measures sum and ratio of sum respectively. For reference quarters and years, mean and ratio of sums are available.

### **1.2.4 Study domains**

The statistics are disseminated according to different breakdowns in study domains. The variables used to create these groups are: sex, age, country of

birth, industry, status in employment, sector, region of work and residence<sup>2</sup>, main source of income and work-related income level. These variables are used individually and in combination.

'Age' is defined as age on the last day of the reference month. Different breakdowns are disseminated for the age group 15-74 years, except for unemployed and labour force, where the corresponding range is 16-64 years.

'Country of birth' is disseminated as 'born in Sweden' or 'foreign born'.

'Industry' is disseminated according to the Standard Industrial Classification (SNI) 2007 and the statistic refers to the industry intended for use for statistical purposes.

'Status in employment' is disseminated according to the categories 'employees', 'self-employed persons' and 'self-employed persons in a joint-stock company'. The category 'employees' includes persons with earned income that is the basis for employer contributions according to the PAYE return during the month. Persons who received benefits from the Social Insurance Agency as described under the second item of the first stage of the definition of labour market status, during at least one of the eleven months preceding the reference month, are also classified 'employed'. Persons assigned labour market status 'employed' on the basis of Nordic income or a statement of earnings and tax deductions filed by employer as described under the first and second items of 'employed' in the second stage of the definition, are also classified 'employed'.

Those operating a business in the form of a sole trader, trading partnership or limited partnership are categorised as self-employed persons.

Persons receiving a PAYE payment from an enterprise for which they have also declared qualified holdings in a closely-held company (form K10), or for which they were registered as beneficial owner in the Swedish Companies Registration Office's register of beneficial owners, during one and the same month, are classified as self-employed persons in a joint-stock company. Persons receiving a PAYE payment from an enterprise for which they are a board member, managing director or chairman according to the Swedish Companies Registration Office's register of representatives, and where the company's address is the same as their registered address, during one and the same month, are also classified as self-employed persons in a joint-stock company.

In cases where a person has several jobs with different statuses in employment, the status in employment generating the most remuneration is selected.

The sector is disseminated according to the Standard Classification by Institutional Sector (INSEKT 2014), with the categories 'business sector',

<sup>2</sup> These statistics aim to describe the location of the places of work to which the employed persons are bound. As this is not the same as accounting for the employed part of the population according to where they are physically located during the day while work is carried out, the term daytime population is not used. As a consequence, the term night-time population is not used when disseminating by region of residence.



‘central government’, ‘municipality’, ‘region’, ‘non-profit institutions serving households’ and ‘other’.

Region is disseminated by county and municipality, and the regional divisions in force on the last day of the month prior to the reference month are used.

‘Main source of income’ refers to the data for the reference month and is disseminated in the following categories: earned income, unemployment benefit, student finance, pension, benefit for long-term reduced work capacity, sickness benefit, parental benefit/care of close relative, financial aid and without income.

‘Work-related income level’ refers to data for the most recent twelve-month period and is disseminated using the Income Base Amount (IBB)<sup>3</sup>. The categories disseminated are: SEK 0, SEK 1 - < 1 income base amount, 1 - <2 income base amounts, 2 - <3 income base amounts, 3+ income base amounts.

For more information on the variables ‘Main source of income’ and ‘Work-related income level’, see [‘Main source of income’ and ‘Work-related income level’](#).

Industry, region of work, status in employment and sector are disseminated for employed persons and refer to information regarding the persons' main region of work and status in employment during the month.

### 1.2.5 Reference times

The target population and the target variable ‘labour market status’ both have a monthly reference period.

Dissemination refers to month, quarter and year, where the quarterly and annual quantities are based on quantities for the reference month.

## 2 Accuracy

### 2.1 Overall accuracy

For the most part, BAS is built around data sourced from administrative systems, primarily created for administrative purposes. The fact that data are not created for statistical purposes means that units and variables may change values, disappear or be added. Regulations and administrative procedures are normally beyond the control of Statistics Sweden.

Frame coverage and model assumptions are the sources of uncertainty considered to have the greatest impact on the accuracy of the final statistics (see Section 2.2 and relevant subsections below).

The overall accuracy is deemed to be relatively high, but the uncertainty of the statistical values is not reported.

The final statistics are deemed more accurate than the preliminary statistics, partly due to delays in reporting of the administrative data used in the

<sup>3</sup> The Swedish Pensions Agency annually calculates the IBB, which is then adopted by the Government. The IBB is used, among other things, to calculate the maximum income for receiving a national public old-age pension. For more information, see [Inkomstbasbelopp och inkomstindex för år 2022 fastställt - Regeringen.se](#) retrieved 15/09/2023.

production of the preliminary statistics (see Section 2.3 Preliminary statistics compared with final statistics).

## **2.2 Sources of uncertainty**

Frame coverage and model assumptions are the sources of uncertainty deemed to have the greatest impact on accuracy.

Reporting shortcomings mean that population register data fail to perfectly reflect how the population should be registered under current regulations. Obligated parties' failure to report changes, or the reporting of incorrect information, due to ignorance, omission, tardiness, carelessness, forgetfulness or other reasons, is the main cause of these reporting shortcomings.

Shortcomings in reporting resulted in the incorrect exclusion of persons from the Population Register, as well as the incorrect inclusion of other persons. These shortcomings are classified as frame-coverage shortcomings, and are addressed in Section 2.2.2 Frame coverage. Reporting shortcomings leading to incorrect variable values are addressed in Section 2.2.3 Measurement. The latter also applies to administrative data used to derive the observation variable 'labour market status'.

Administrative data are used to derive, among other things, the observation variable 'labour market status'. Several model assumptions are made, and a source of uncertainty, due to the non-coincidence of the target and observation variables, therefore remains. This is described under 2.2.6 Model assumptions.

### **2.2.1 Sampling**

This source of uncertainty does not contribute to the uncertainty of the statistics.

### **2.2.2 Frame coverage**

The frame population is all persons registered in the population records of Sweden, according to the Total Population Register (TPR), on the last day of the reference month.

Persons incorrectly excluded from the register cause undercoverage, while those incorrectly included in the register cause overcoverage. Coverage gaps mainly arise from shortcomings in the reporting of deaths, immigration and emigration. At the regional level, shortcomings in the reporting of interregional migration within Sweden cause coverage problems. For more detailed information regarding frame coverage, see the quality report for Population Statistics.

### **2.2.3 Measurement**

TPR data are taken from the population register. It is mainly the Swedish Tax Agency that collects, measures and registers these data. The variables where measurement errors are deemed to exist are mainly where persons are responsible for reporting data to the population register themselves, e.g., when moving house. For more detailed information regarding measurement and the TPR, see the quality report for Population Statistics.

Data are retrieved from Statistics Sweden's Statistical Business Register, with retrieval at the end of each reference month. These data are used to create study domains based on the variables 'industry', 'status in employment', 'sector' and 'workplace region'. Data from the Statistical Business Register are also used as part of generating the labour market status 'employed'.

The data in the Statistical Business Register mainly consist of information retrieved from administrative registers at the Swedish Companies Registration Office and the Swedish Tax Agency. There is a risk that the data in the Statistical Business Register contain errors that affect the measurement in BAS. This may be because data on industry or the workplace composition of enterprises is out of date. Measurement errors may also arise because the Statistical Business Register contains a backlog of registrations in connection with business reorganisations. For more information on the accuracy of the Statistical Business Register, see the quality report for the Statistical Business Register.

Basic data for the statistics are obtained from the Swedish Public Employment Service, the Swedish Companies Registration Office, the Swedish Board of Student Finance, the Swedish Social Insurance Agency, the Swedish Pensions Agency, the Swedish Tax Agency, the National Board of Health and Welfare and Statistics Sweden. The primary responsibility for collecting and recording the data lies with the respective authorities. The quality of statistics is mainly determined by the quality of the registers and administrative systems of these authorities. The data are processed and compiled in the BAS register.

#### *Swedish Public Employment Service*

Retrieval is carried out on the 25th following the end of the reference month. The data consist of all persons registered with the Public Employment Service at some point during the reference period as well as information on applicant categories.

#### *Swedish Companies Registration Office*

Data are delivered via daily notifications. Retrieval is carried out at the end of August following the reference year for all months. The data refer to representatives and beneficial owners of enterprises.

#### *Swedish Board of Student Finance*

Data are delivered on the 15th following the end of the reference month. Retrieval is carried out at the end of August following the reference year for all months. The data consist of all persons receiving monthly study grants during the current reference period as well as corrections of previous data.

#### *Swedish Social Insurance Agency*

Data are delivered on the 28th following the end of the reference month. The data are taken from the Social Insurance Agency's STORE system and refer to persons who received monthly payments during the reference period in question. Retrieval is carried out at the end of August following the reference year for all months. The data consist of all persons receiving monthly payments during the current reference period as well as corrections of previous data.

#### *Swedish Pensions Agency*

Data are delivered on the 20th following the end of the reference month. Retrieval is carried out at the end of August following the reference year for all months. The data consist of all persons receiving monthly national public pension payments as well as corrections of previous data.

#### *Swedish Tax Agency*

Retrieval of employer's declarations, statements of earnings and tax deductions filed by employers, and business activity declarations is carried out at the end of August following the reference year for all months or years. All changes relating to the reference month or year in question, and received by Statistics Sweden from the Tax Agency up to and including August of the year following the reference year, are thus taken into account.

Data on recipients of payment from employers in Denmark, Finland, Iceland or Norway during the reference year are also obtained from the Tax Agency.

#### *National Board of Health and Welfare*

Retrieval is carried out in June of the year following the reference year. The data consist of all persons receiving monthly social assistance payments in the current reference period.

#### *Statistics Sweden*

To improve the classification of students for the final versions, data on enrolments in basic higher education from the Register of Universities and University Colleges, as well as enrolments according to the Register of Municipal Adult Education and the Register of Municipal Adult Education in Swedish for Immigrants (sfi), are used.

### **2.2.4 Non-response**

The administrative data used in the generation of labour market status are the result of data received by the relevant authorities. To the extent that any data held by these authorities were missing when the statistics are compiled, this is considered non-response.

Data referring to an employed person's main workplace are generated using the corporate identity number and local unit number in the PAYE return, together with data from the Statistical Business Register. The local unit number is a variable in the PAYE system which employers with business activity at more than one address are expected to provide. Non-response in local unit numbers is compensated for using imputation. In terms of size, data on local unit numbers for 130,000 - 150,000 persons are imputed per month.

### **2.2.5 Data processing**

Processing includes the co-processing of the administrative data on which the statistics are based. There is always a risk of errors in such processing, but the size of the source of uncertainty is not indicated.

### **2.2.6 Model assumptions**

Administrative data are used to derive the observation variable 'labour market status' and to derive the variables used as the classification basis for deriving study domains. Several model assumptions are made, and a source of uncertainty, due to the non-coincidence of the target and observation

variables, therefore remains. This is also the case for the variables used as the basis for creating study domains.

For those labour market statuses which are defined using data on the timing of payments, the data are used under the assumption that the period of the payment coincides with the period to which it refers. There is no estimate of the extent to which shortcomings in this model assumption affect the accuracy of the statistics. Nor are adjustments made for this model assumption in the estimation procedure. In the final statistics, this mainly concerns the labour market status 'employed', where data on payment of earned income that is the basis for employer contributions according to the PAYE return are used. See also Section 2.3 Preliminary statistics compared with final statistics.

On the basis of the target variable dimension, a person who is temporarily absent from work is considered to be employed. In an attempt to address this, persons who have received some benefit from the Social Insurance Agency during the reference month, and who have also received earned income that is the basis for employer contributions in a month preceding that period, are classified as employed. It is therefore assumed that these persons are temporarily absent. There is no estimate of the extent to which this model assumption affect the accuracy of the statistics.

There is a risk of misclassification in the method for self-employed persons. This is because self-employed persons fail to appear in the sources used, or appear with reference to the wrong period, or the entire year, even if the person was only active for certain parts of the year. This misclassification entails that the statistics miss self-employed persons in some cases, and in others mis-classify self-employed persons.

Data other than payments made are also used to infer labour market status. These data include, for example, data regarding registration as unemployed with the Public Employment Service. Since being registered as unemployed at some point during a given month does not necessarily coincide with being unemployed at some point during the month, a source of uncertainty remains. This applies primarily to unemployed persons who choose not to register with the Public Employment Service.

For those persons assigned the labour market status 'employed', information related to the main workplace for employment, e.g., location and industry, is also reported. For persons employed in several workplaces, a model assumption is made that the main workplace is the one which generates the most earned income for the employed person. If there are data on PAYE earned income for a person who is also assumed to run an active enterprise as a sole trader, a trading partnership or limited partnership, or a self-employed person in a joint-stock company, the main workplace is derived using model assumptions regarding the main place of work. This is done by relating earned income to entrepreneurial income.

For persons employed in enterprises which, according to the Statistical Business Register, have several workplaces, the local unit number from the PAYE return is combined with data from the Statistical Business Register to determine the industry and location of the main place of work. This means, among other things, that employees who do not typically report to any of the

employer's permanent workplaces to commence work, and for whom the employer has reported this in the PAYE return (or if the data provided in the PAYE return is suspected to be incorrect), then the municipality of residence will be used as the workplace municipality. This could involve, e.g., travelling salesmen or construction workers. Persons who, according to the PAYE return, are placed in a workplace far from their home, even though there is a workplace close to their home in the same enterprise, receive imputed workplace data. This is done only when such persons constitute a large proportion of those in the workplace, and on the assumption that local unit numbers in the PAYE return have been mistakenly assigned by the enterprise.

For employees of an enterprise which, according to the Statistical Business Register, has only one place of work, data from the statistical Business Register are used to determine the industry and location. For enterprises where a large proportion of the staff live far from the place of work, it is assumed that they are based at home, and thus the municipality of residence is used as the municipality of the place of work.

#### **Statistical disclosure control**

Statistics Sweden is obliged to prevent individuals' data from being disclosed in the reported statistics. BAS uses a methodology that allows detailed statistics to be disseminated without the need to hide statistical values, or to make parts of the report less detailed. This method involves introducing random uncertainty into the statistics in a controlled manner, without introducing systematic bias into the statistics.

All statistical values, including totals, greater than zero, are adjusted by a small negative or positive integer. Some statistical values are left unchanged. A consequence of this method is that the totals reported do not always equal the sum of their reported components. For example, the reported total for women and men does not necessarily equal the sum of the reported statistical values for women and men.

The added uncertainty is small, but its impact is greater for low frequencies than for high ones. This also has implications for proportions, which should always be interpreted with caution when based on low frequencies.

If the reported statistical values are added to create a new total, the uncertainty is also added. There is therefore a risk that the new total contains more uncertainty than would have been assigned to an individual statistical value under the method.

### **2.3 Preliminary statistics compared with final statistics**

Both preliminary and final statistics are disseminated. This quality report refers only to the final statistics.

The main differences between the production of preliminary and final statistics are:

- The frame population in the final version is the TPR as of the last day of the reference month. This is in contrast to the last day of the month prior to the reference month, in the preliminary.
- In preliminary statistics, the timing of payments is used in the definition of most labour market statuses. The final statistics instead use, whenever

possible, the period when the activity to which the payment refers took place. This applies to various benefits from the Swedish Social Insurance Agency, the Swedish Pensions Agency and the Swedish Board of Student Finance, while it is not possible, for example, using available PAYE data.

- The methodology that identifies self-employed persons and self-employed persons in joint-stock companies is also based on annual information in the final statistics. This additional information is not available at the point in time that the preliminary statistics are produced, increasing the number of entrepreneurs in the final statistics.
- Additional data are taken into account in the final statistics. These data, such as data on enrolment in education, are not available when preliminary statistics are disseminated.
- Income data for persons working in other Nordic countries are used in the production of the statistics. Final statistics use data referring to the relevant reference year. However, these data are not available for the production of preliminary statistics. The preliminary statistics instead use data for the year which preceded the reference year by two years.
- Production of final statistics uses a later version of the PAYE return than production of preliminary statistics, which means, among other things, that no adjustment is made for any non-response uncertainty from PAYE data in final statistics.

For further information, see the report [Differences between preliminary and final BAS statistics](#).

### **3 Timeliness and punctuality**

#### **3.1 Production time**

For the reference year and all months and quarters therein, statistics are reported eleven months after the end of the year. The production time, i.e., the time between the end of the reference time and point in time when statistics are disseminated, is thus between eleven and 22 months for statistics with a monthly reference time, with production time depending on the reference month.

For statistics with a quarterly reference time, the production time is between eleven and 20 months, depending on the quarter. The production period is eleven months for statistics with an annual reference time.

#### **3.2 Frequency**

Regardless of the reference time, the statistics are reported once a year.

#### **3.3 Punctuality**

The statistics have been disseminated in accordance with the publishing calendar.

## **4 Accessibility and clarity**

### **4.1 Access to the statistics**

The statistics are disseminated on the product page, which can be found at Statistics Sweden's website, [Population by Labour market status \(BAS\) \(scb.se\)](https://www.scb.se), and in the statistical database, which can be accessed via the product page.

### **4.2 Possibility of additional statistics**

It is possible to access additional statistics, beyond those disseminated on the Statistics Sweden website, on a commissioned basis.

### **4.3 Presentation**

The statistics are presented in the form of tables and texts.

### **4.4 Documentation**

Documentation is available on the product page, [Population by Labour market status \(BAS\) \(scb.se\)](https://www.scb.se). This includes a description of how BAS relates to various other labour market statistics and a description of 'Main source of income' and 'Work-related income level'.

Detailed information on microdata is described in Statistics Sweden's microdata documentation (MetaPlus).

## **5 Comparability and coherence**

### **5.1 Comparability over time**

A large part of the administrative data underlying the production of statistics for 2020 and 2021 were delivered from the relevant authorities to Statistics Sweden on one occasion. This means that these data represent information available in the administrative systems of the authorities at the time of delivery, rather than what would have been the case if data were delivered continuously over the period, e.g., on a monthly basis. As of January 2022, statistical production uses administrative data delivered to Statistics Sweden on a monthly basis. This may have some impact on the comparability over time of statistics reported within BAS, but there is no assessment of the magnitude of this impact.

### **5.2 Comparability among groups**

The statistics in BAS are comparable between different study domains, such as age groups, because the same definitions are used for all groups.

### **5.3 Other coherence**

The Labour Force Surveys (LFS) and the Swedish Public Employment Service's activity statistics are two other important sources for users seeking to track the size and development of the labour supply in Sweden. These three sources present statistics that are described and labelled similarly and can be used in similar contexts. However, there are significant differences between the three sources, both in terms of how target characteristics are defined and how they are estimated. These differences must be taken into account for



coherence purposes. For more information, see [Hur förhåller sig BAS till AKU och Arbetsförmedlingens statistik? \(pdf\) \(scb.se\)](#)

#### **5.4 Numerical consistency**

There is good numerical consistency between BAS statistics for the same reference period. However, the reported totals do not always equal the sum of their reported components. This is a consequence of a statistical methodology used to protect individuals' data in the disseminated statistics. See also Section 2.2.6 Model assumptions.

### **General information**

#### **A The classification Official Statistics of Sweden**

These statistics constitute official statistics.

Special regulations apply to the quality and accessibility of statistics included in Sweden's Official Statistics (SOS) (see the Official Statistics Act ([2001:99](#)) and Ordinance ([2001:100](#)) as well Statistics Sweden's Regulations on the quality of Official Statistics ([SCB-FS 2016:17](#))).

#### **B Confidentiality and the handling of personal data**

In the special activities of government authorities for the production of statistics, confidentiality applies in accordance with Chapter 24, Section 8 of the Public Access to Information and Secrecy Act ([2009:400](#)). In order to protect the confidential data of individuals and enterprises, it is ensured that they cannot be disclosed directly or indirectly in published statistics. See also Section 2.2.6 Model assumptions.

When handling personal data, i.e., information that can be directly or indirectly attributed to a living person, the Official Statistics Act ([2001:99](#)) and Ordinance ([2001:100](#)) apply, as well as the General Data Protection Regulation 2001/99 and the Regulation (2001:100) containing supplementary provisions to the EU General Data Protection Regulation ([2016/679](#)).

#### **C Storage and elimination**

Storage needs are under investigation.

#### **D Obligation to provide information**

There is no obligation to provide information to these statistics.

#### **E EU regulation and international reporting**

These statistics are not regulated by the EU.

#### **F History**

Preliminary statistics based on BAS were disseminated for the first time on 31 May 2022 for the reference period January 2020 - March 2022. The corresponding final statistics were reported for the first time on 30 November 2023 for January 2020 - December 2022.

## G Contact details

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