Labour market statistics at Statistics Sweden

22 May 2024 Krister Näsén Statistics Sweden



Labour market statistics

- Several different statistical products aimed at describing the Swedish labour market
- Some are regulated by Eurostat, some are not
- Sweden have a long history of keeping a lot of records and registers with regards to the population, work, educational attainment and so forth



Regulated by Eurostat

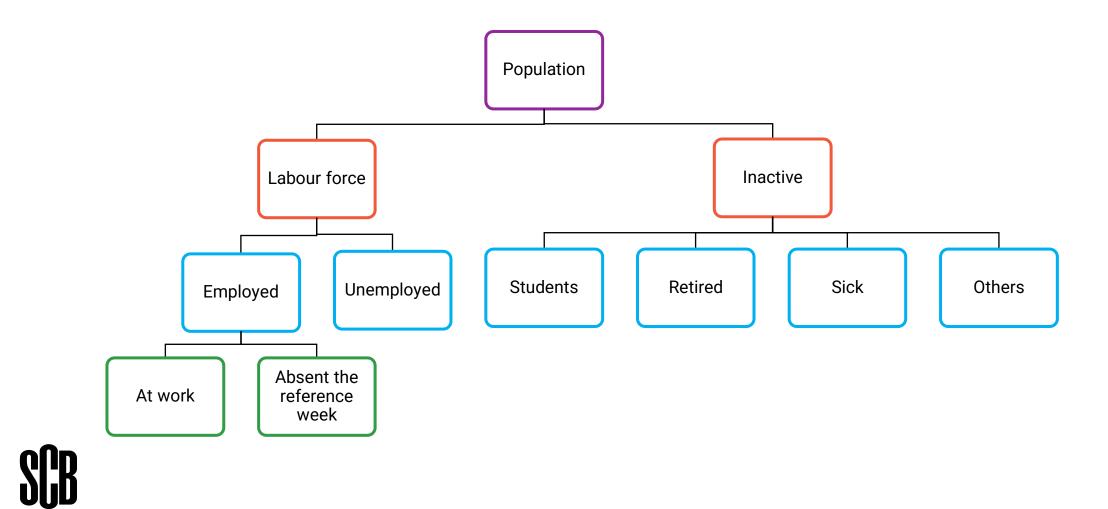


Labour force surveys

- The concepts in the labour force survey are defined by ILO (International labour organisation)
 - Who is employed
 - Who is unemployed
 - Who is inactive
- The concepts are the same in all countries
- We survey the economic activities performed by an individual during a fixed reference week



The definitions



Swedish LFS in short

- Started off at the Swedish public employment service in 1959
- Has been done by Statistics Sweden since 1961
- Has undergone several changes over the years
- From 2007 in full compliance with ILO for our national reporting: International Labour Organisation (ILO) → Eurostat → Statistics Sweden
- Latest revision was in 2021 with regulation 2019/700
 - Regulates more exactly how the survey is to be done



Swedish LFS in short cont.

- Started of as a quarterly survey 1961-1970
 - Still a quarterly survey but with monthly publications
- Every month was sampled but just two adjacent "ox weeks"
 no national holidays
- From 1993 the Swedish LFS has had "rolling" reference weeks where all weeks in the year are sampled
- From 2005 the LFS questionnaire was revised to fully harmonize with Commission Regulations



Outlay of the survey

- Sample survey with the target population of persons residing in the country in private households aged 15-89 years old
 - 15-74 year before 2021
- Sample size has varied over the years but is today roughly 17 500 individuals per month sampled from the Swedish population register

Outlay of the survey cont.

- Panel design each person is interviewed once each quarter during 2 years
- Built around reference weeks
 One LFS-month = 4–5 reference weeks
- Data is collected through CATI and from April 2024 also through CAWI

Panel design

- Data collected for the LFS is supposed to be do done through a panel design
 - Many countries employ a 2-2-2 scheme
- In Sweden each respondent is interviewed each quarter for eight consecutive quarters
- Bigger sample with lower respondent burden
- By interviewing the same persons as in the previous quarter better information is achieved on changes in the labour market



Panel design cont.

- Correlation between quarters
- Also make it possible to do flow statistics
 - How many of the unemployed got employed the following quarter for example
- A quarterly sample consists of three separate samples (independence between months)



	Rotation 8 wave panel design							
	1	2	3	4	5	6	7	8
January	A ₁	A ₂	A ₃	A ₄	A ₅	A ₆	A ₇	A ₈
February	B ₁	B ₂	B ₃	B ₄	B ₅	B ₆	B ₇	B ₈
March	C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	C ₇	C ₈
April	A ₉	A ₁	A ₂	A ₃	A ₄	A ₅	A ₆	A ₇
Мау	B ₉	B ₁	B ₂	B ₃	B ₄	B ₅	B ₆	B ₇
June	C ₉	C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	C ₇
July	A ₁₀	A ₉	A ₁	A ₂	A ₃	A ₄	A ₅	A ₆
August	B ₁₀	B ₉	B ₁	B ₂	B ₃	B ₄	B ₅	B ₆
September	C ₁₀	C ₉	C ₁	C ₂	C ₃	C ₄	C ₅	C ₆
October	A ₁₁	A ₁₀	A ₉	A ₁	A ₂	A ₃	A ₄	A ₅
November	B ₁₁	B ₁₀	B ₉	B ₁	B ₂	B ₃	B ₄	B ₅
December	C ₁₁	C ₁₀	C ₉	C ₁	C ₂	C ₃	C ₄	C ₅
January	A ₁₂	A ₁₁	A ₁₀	A ₉	A ₁	A ₂	A ₃	A ₄
February	B ₁₂	B ₁₁	B ₁₀	B ₉	B ₁	B ₂	B ₃	B ₄
March	C ₁₂	C ₁₁	C ₁₀	C ₉	C ₁	C ₂	C ₃	C ₄
April	A ₁₃	A ₁₂	A ₁₁	A ₁₀	A ₉	A ₁	A ₂	A ₃
Мау	B ₁₃	B ₁₂	B ₁₁	B ₁₀	B ₉	B ₁	B ₂	B ₃
June	C ₁₃	C ₁₂	C ₁₁	C ₁₀	C ₉	C ₁	C ₂	C ₃

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Use of other registers

- Although being an invidually based sample survey we rely heavily on registers from other parts of Statistics Sweden and other government authorities
 - We draw our sample from the Swedish population register
 - During the interview we use place of work from the tax registers
 - We use tax registers and data from the Swedish Public Employment Service in our weighting
 - > GREG-estimator
- We rely heavily on others to do each monthly publication

European business statistics

- Previously Short term employment statistics
- Statistics on the number of employees by detailed industry level and county
- Also data on personnel turnover and sick leave.
- Also regulated by Eurostat
 - But unlike the LFS Eurostat has defined the concepts and it is up to the member country on how to produce data



European business statistics cont.

- Was previously a survey
 - Sampling frame was active places of work and economic entities that had one or more employees
- Statistics Sweden as well as Eurostat want to reduce the respondent burden
 - For small businesses it was often a challenge to report all data that Statics Sweden require
 - Many of the surveys directed to businesses and employers are mandatory
 - No individual surveys are mandatory



European business statistics cont.

- Since 2020 Statistics Sweden has access to tax registers on a monthly basis on employees
 - Employed also by the LFS
- In order to reduce the respondent burden, the EBS has instead started (or will very soon) publish data on employees solely based on tax registers
- To be able to publish data on personnel turnover and sick leave a much smaller sample then previously is drawn



Unregulated by Eurostat



Population by Labour market status

- The Swedish tax agency has introduced monthly "pay as you earn (PAYE) tax returns"
- Statistics Sweden get sent these continuously
- Statistics Sweden wanted to modernise its labour market statistics
- Complements the LFS
 - Regional data
 - Smaller age groups

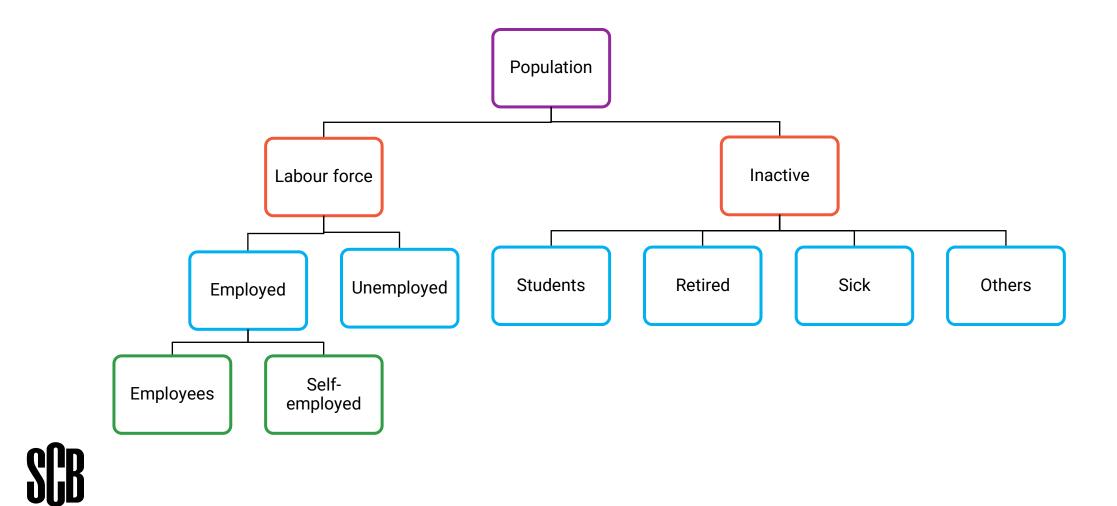


Population by Labour market status

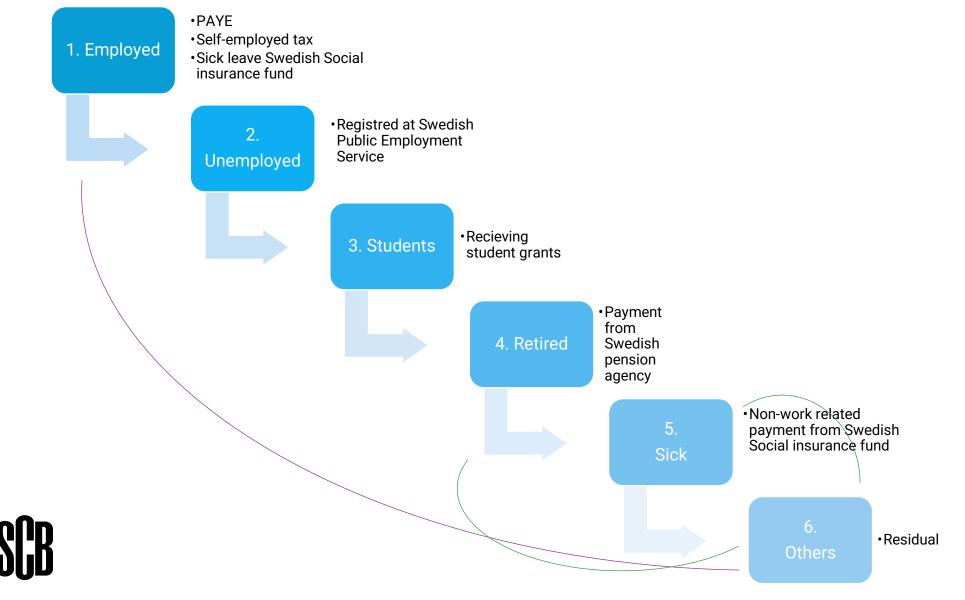
- The purpose is to describe the Swedish labour market and its development over time
- Describes the population from six different labour market statuses
- Based solely on administrative records/registers
- Data is published monthly, quarterly and yearly
- Is official statistics (is deemed of enough quality) as of September 2023



Arbetsmarknadsstatus







Challenges and prerequisites?

- For individual based surveys
 - Dwindling response rates
 - To keep up the quality we are heavily reliant on registers and data from other government agencies/authorities for weighting, contacting respondents, use during the interview and so on
- For register based surveys
 - Even with very good registers no data set is not complete
 - Requires a very high degree of cooperation between the different government agencies/authorities
- Cooperation and dialogue are key words both for the survey produced statistics as well as that produced solely through registers



Thank you for listening!

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