

Ingegerd Jansson
David Sundström

Meeting with the Scientific Advisory Board (SAB) of Statistics Sweden (SCB)

27-28 May 2021

Attending board members

Jan Bjørnstad, Statistics Norway and University of Oslo
Barteld Braaksma, Statistics Netherlands
Anders Holmberg, Australian Bureau of Statistics
Per Johansson, Uppsala University
Annette Jäckle, University of Essex
Sune Karlsson, Örebro University
Johanna Laiho-Kauranne, Statistics Finland
Thomas Laitila, SCB and Örebro University
Xavier de Luna, Umeå University
Natalie Shlomo, University of Manchester
Daniel Thorburn, emeritus

Attending SCB staff

Joakim Stymne, chair
Folke Carlsson
Marie Haldorson
Lilli Japac
Mats Bergdahl-Kercoff
Gustaf Strandell
Joakim Malmdin
Cecilia Wass
Marie Hollertz
Frida Videll
Yingfu Xie
Suad Elezovic
Tiina Orusild
Magnus Sjöström
Thomas Önskog
Eva Elvers
Annika Lindblom
Peter Nilsson
Cecilia Stenbjörn
Ingegerd Jansson, secretary
David Sundström, secretary



Welcome

Joakim Stymne welcomed the members of the Board to the meeting.

Daniel Thorburn and Natalie Shlomo are leaving the Board. Joakim thanked them for their valuable contributions and dedicated work over the years.

Folke Carlsson, head of Statistics Sweden's department for development of processes and methods is retiring from SCB. He will be succeeded by Marie Haldorson, head of the unit for methods and architecture in the new organization (see below).

Sadly, Lars Lyberg passed away in March this year. Lars was a long-time member of the Board, and made numerous contributions to the survey community. Read the obituary here: [in-memory-of-lars-lyberg-founder-of-jos.pdf \(scb.se\)](#)

Current issues at Statistics Sweden

2020 and 2021 have been busy years, due to the Corona crisis, and in addition, Statistics Sweden is currently undertaking a reorganization.

The vision and strategic goals of Statistics Sweden are useful and necessary, but issues in the current organization make it harder to reach the goals. An organizational overhaul has become necessary. Other reasons are the digital transformation, new approaches to data (i. e., the possible role as data steward), to improve internal cooperation, and clarity of roles, mandates and responsibilities. Some key features of the new organization are shown in the attached presentation (1>Welcome and current issues Joakim Stymne).

Due to the pandemic, almost all staff are still working from home. This possibility will largely remain after the pandemic, and consequently, office space has been reduced. Development work has not slowed down significantly. Notably, the number of sick days has decreased.

Comments and replies

It is good to be aware of the new data situation and act in time, to be pro-active. There are several issues to consider; Use of new data (private sector data), new ways of using data, reaching out in new areas of data application, finding a new role for the NSI. In addition, many more people seem to have found out that data are the ground artificial intelligence rests on. Are there discussions between statistical offices? CBS would be willing to discuss common issues.

Joakim commented that discussions with other agencies has taken place and also domestically in the form of discussions at the

governmental level about, e.g., Sweden's national data strategy related to smart statistics.

The number of sick days has decreased also at ABS. Other actions to reduce sick leave have been introduced, such as flexible work time.

The new organization will still have an IT department. Will that not be a ground for conflict about responsibilities? Joakim commented that the best option is to continue with an IT department but with strong conditions for cooperation.

The new organization will have a central method unit, which is important. Statistics Finland has that too and in addition a separate data scientist unit. There is a network for method, as it is necessary to have strong cooperation within the organization. How will that be solved in the new organization? Joakim commented that this issue is not solved at Statistics Sweden yet, it will be helpful to look at Statistics Finland.

Remote work has reduced sick leave overall in Finland. Cardiac disease is decreasing in the country due to less stress. There are discussions for more permanent solutions, such as government facilities for working near to your home. There are similar discussions in Sweden.

Topic 1 Searching for a new survey design measuring household consumption for use in CPI and NA.

Thomas Laitila introduced the topic (see attached presentation 2.Topic 1 Thomas Laitila).

Per Johansson opened the discussion (see attached presentation 3.Topic 1 Per Johansson).

Comments and replies

CBS has similar problems with HBS. The frequency of the survey is now reduced to every 5th year. The CPI uses scanner data for the weights, and National accounts regards the household sector as a residual. At the same time, there is a lot of demand in society for the information that HBS could provide.

Like Statistics Sweden, CBS also works with GFK, but for all retail and not only electronics. They have an interest to align their figures with CBS. It could be an idea to collaborate with GFK at the European level.

Would new European directives be a way to gain access to individual financial transactions? There is however a risk of a heavy selection effect. In Norway, there is a central hub for data, and Statistics Norway has access to a mix of bank and transaction data, with good matching accuracy. It is important to understand that it is not possible to replace

something with something else and expect the results to be comparable.

It will be necessary to use several sources, and there is a cost for bringing data in. A cost – benefit analysis is relevant. The best option is likely to be modelling complemented with validating surveys, rather than trying to find sources that fits everything.

With modelling, this can be viewed as a prediction problem, and a challenging issue is how to measure the uncertainty. A model-based approach must be validated with special surveys, and they might have higher response rates than the regular surveys.

Much more methodological work is necessary, with an aim to take the burden of respondents. Utilization of AI is a novel approach, but so far there are not enough solid models or enough data to rely on the results. Statistics Finland has used transaction data, but linking individual payments to household consumption needs further study. Many issues still remain in order to get high quality data and results. It is important to remember mobile payments and other digital tracks left by consumption is an enabler for future official statistics.

Another line of the discussion (in the chat) was the use of apps for data collection. This is considered in the ESSnet smart statistics project. Would people want to participate more if they had access to an app?

A number of apps are already available; an app developed by Statistics Austria is one example. With the app, the respondents still have to enter all expenditure items manually. Similarly, in the ESSnet app, data entry is manual or respondents can upload photos of their shopping receipts. Thus data collection still requires active participation by the respondent.

Selectivity is an issue, as use might be related to age for example, but also selectivity because people do not have compatible mobile devices, or not enough storage space on their phone, or are uncomfortable installing and using apps, etc. Participation rates in surveys using mobile apps are generally quite low. Passive data collection is much less burdensome for respondents and would possibly result in higher participation rates, but there is evidence that people prefer to have some control over the data that are being collected.

Reference:

https://www.makswell.eu/attached_documents/output_deliverables/deliverable_4.3.pdf

Topic 2: Linking time series in the Swedish LFS A consequence of the new EU framework regulation 2021

Frida Videll introduced the topic (see attached presentation 4.Topic 2 Frida Videll).

Barteld Braaksma opened the discussion (see attached presentation 5.Topic 2 Barteld Braaksma).

Jan van der Brakel is willing to assist. See also Van den Brakel et al (2020) Measuring discontinuities in time series obtained with repeated sample surveys ISR 88:1 155-175 <https://doi.org/10.1111/insr.12347>.

Comments and replies

Users want very different things, and the effect on the time series of the changes in the LFS is different for different users.

The Board commented that it might not be that Statistics Sweden should fix the time series, maybe only give information and let the users deal with the potential jumps in the series. Users want time series to be linked but they do not always need it. Those who really need it could possibly correct by themselves, with access to raw data.

This is not an option, as it stands. It is bad luck that the changes coincide with the pandemic, now that people are very particular about changes in the economy and have strong views on where it is heading. As the LFS may not have confirmed "conventional wisdom", this can have led to stronger criticism toward the estimates. The media attention has led to more government attention.

Finland has the same problem with confusion with the effects of the pandemic in Finland. International cooperation on these experiences is an idea, and it is supported by the Swedish government.

A communication package with related time series could shed light on the potential turning point issue. Think outside the individual statistical product and compare with other domestic products related to the LFS.

It could be useful to look at other labour market data, and compare parallel series, for example productivity compared to the number of people working. It could help in validating the models. Statistics Sweden is using administrative data for that, it has some limitations but is still useful.

There were similar issues in 1992-93 when Statistics Sweden supplied many linking coefficients. Substantial communications work was necessary, as users found it difficult to use the coefficients. There were also changes in 2005, but with a different method.

Comparisons between old and new series are important during 2021.

There has not been any effect on the response rate due to the reformulated/new questions in the LFS.

CBS and CERN collaboration

Barteld Braaksma gave a short presentation (see attached presentation 6.CBS-CERN collaboration Barteld Braaksma).

More information from CBS is available (so far only in Dutch) at <https://www.cbs.nl/nl-nl/corporate/2021/18/digitale-tweelingmaatschappij-belicht-complexe-samenleving>

See the video at saturnus.geodan.nl/covid/video.html

Comments and replies

Covid-related behaviour, social inclusion and mobility are mentioned as relevant applications. Another important application is migration patterns; there is a lot of similar work on that going on.

Is there any discussion in the Netherlands on the needs to make legislative changes to the role of the national statistical institute? Are there 'competitive' service providers?

CBS is not trying to change the statistical law right now but rather an associated decree focusing on improved access to some private data sources. CBS would like to see a discussion with all kinds of stakeholders to communicate the plans and get reactions. The relation to, and possible unfair competition with, other (mainly private) service providers (consultants, market researchers, ...) is under close scrutiny and has even led to debate in parliament and formal investigations.

Topic 3: Respondent burden for small businesses

Eva Elvers introduced the topic (see attached presentation 7.Topic 3 Eva Elvers).

Anders Holmberg opened the discussion (see attached presentation 8.Topic 3 Anders Holmberg).

Comments and replies

It should be possible to randomly remove respondents from samples beforehand and treat these non-responders as missing at random. Then fewer need to respond and hence response burden is decreased. However, this may be hard to introduce in practice, and it will introduce dependencies to other statistical products. In such cases this can be seen as conditional missing at randomness.

Small businesses may not be very important at the macro level, but might very well be at the micro level. It depends on the user-needs. CBS uses a holistic approach and does not look at individual surveys. But there are difficulties implementing this in practice. CBS worked on taxonomy, and a developed scheme was adopted by the tax office. The willingness to use it among companies was lesser than CSB thought even though developers of the IT-systems were willing to incorporate it.

Small businesses are important for the total in studies like these. You should not use cut off. Instead, lower the sample size, use models and employ register data. This is nothing but a methodology problem.

Concluding words

Joakim thanked all participants for interesting presentations and discussions.

Daniel Thorburn is leaving the Board after 32 years and gave a short review of his time as a member of the Board.

Daniel started to work at Statistics Sweden in 1975. His first meeting with the board was as presenter of two studies on agricultural statistics. Only finished projects were reported to the board at that time, it was a reward for a job well done. Daniel left Statistics Sweden after five years, and returned as a board member in 1989. Joining the scientific board of any government agency was an honour, and the members were formally appointed by the Swedish king.

The board members were professors at different departments; public health, geography, and other subject matters, methodology including computer science and psychometrics. The board met six times a year, at half-day very formal meetings. They discussed projects but also budget issues. In the early nineties, the Swedish system for official statistics was decentralized. The Board was against it. The new director general re-organized the board completely and removed subject matter representatives. New routines and working methods were introduced. Projects were introduced to the Board at a much earlier stage in the process, and they were asked for advice. There were two meetings a year, for a total of three days. The new organization worked well, and the director-general was happy.

To meet for whole days made more informal discussions possible, and that has been an important part of the work. In recent years, some changes in the routines have been gradually introduced, in a less dramatic way than in the nineties. Daniel's impression is that the Board is well functioning, even though the present pandemic has made everything a bit more difficult.