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Summary statistics in Switzerland

Integrating LFS with other sample surveys or
administrative data

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1 Introduction

For many years, the Swiss Federal statistical office (SFSO) has produced summary statistics which combine LFS data and additional data, making it possible to provide results by domestic concept, i.e. on all persons, residents or non-residents, working on Swiss economic territory. These additional data are taken from administrative sources or other surveys.

At the same time, the FSO links LFS data with social insurance register data to provide a source of analysis in this field.

Finally, the FSO has seen some change in requests for LFS data with a growing number of requests for microdata linked with other administrative sources.

This paper presents these forms of extended LFS data, their use, limits and the challenges involved.

2 Summary statistics of the labour market

Switzerland has been compiling summary statistics on the labour market for a long time. They are mainly established on the basis of LFS data completed by data from other surveys, register data or administrative data. Unlike matching, summary statistics are not generally compiled at microdata level.

2.1 Advantages of summary statistics

Summary statistics make it possible to produce additional statistical information **without additional survey costs**.

The main reason why Switzerland compiles these statistics is linked to the impact of migration. To analyse the labour market in a context of high immigration, it is important to consider the impact of the latter not simply within the permanent resident population. We arrive at the main indicators by the **domestic concept**, which is also the reference concept used in the national accounts.

Thus for Switzerland, the impact of employed persons who do not belong to the permanent resident population is considerable, accounting for 8% of the total employed population, with 6.5% from cross-border commuter work alone.

The production of summary statistics also makes it possible to disseminate **complementary breakdowns** for which the LFS sample is unable to provide enough detail. This is notably the case for the breakdown by economic activity.

Finally, the production of summary statistics makes it possible to provide **periodic results** which are not those from the LFS, such as for unemployment data.

2.2 Summary statistics from the Swiss labour market

	Domestic concept	Complementary breakdowns	Complementary periodic results
LFS based :			
ES employment statistics	X	X	X
Unemployment statistics ILO-based		X	X
WV work volume statistics	X		
LMA labour market accounts	X		
Not LFS based :			
CCS cross-border commuters statistics		X	

2.3 Limits and challenges of the summary statistics

The indicators of certain summary statistics are similar to those of the LFS leading to the need to properly document the data presented and to clearly **explain the definitions used and the concepts covered**. In Switzerland, the employment statistics and the unemployment statistics are jointly disseminated with the quarterly publication of the LFS results via a press release; this contains a combination of information from these 3 sources. The experience has been positive and shows that there is ultimately little confusion among users.

The main challenge is **revising the sources used** in the summary statistics. These are often non-simultaneous. For each revision of the source, it is important to consider the right moment and the extent of the revision to be integrated into the synthesis statistic.

Modifications of the source call for re-examination of their usage, as does making new sources available.

The sources available often present different definitions or use other nomenclatures, making **harmonisation efforts important**.

If the objective of the synthesis statistic is to move from the permanent resident population concept to the domestic concept, the available complementary sources present a **limited number of variables** and less detail than that of the LFS.

Finally, the summary statistics are often compiled on the basis of **hypotheses**. These must be re-examined regularly in terms of their relevance.

3 SESAM matching (Social protection and labour market)

The SESAM statistical source is composed of a linkage of data from the Swiss LFS with information gathered from different social insurance registers (old age, survivors' and disability insurance AVS/AHV; disability pensions; complementary benefits; unemployment insurance). The SLFS focuses mainly on the labour market but its modules also cover the topics of education and training, unpaid work, migration and social security. The contribution of data from registers to each SLFS makes it possible to **broaden analyses** of the fields of health, income, retirement and unemployment by merging the SESAM data gathered from registers with the SLFS data. For example, SESAM data have enabled detailed analyses on persons who are no longer entitled to receive unemployment benefits.

The linkage of information from different, existing administrative sources meets a need to **reduce the administrative burden** upon private individuals and organisations. Over time, **costs** should also be reduced.

The SESAM project has been the first major project for matching survey data and administrative data carried out at the FSO. The lessons learnt from this have been useful for subsequent works in this area and the processes to be put in place, especially concerning the management of matching keys and the pseudonymisation of data.

The quality of data depends both on the quality of sources and of the linkage. The main problems encountered at the start of the project were linked to the lack of a **common identifier in the data sources**. To link the data from registers to the SLFS data, the respondents' AVS/AHV numbers serve as a key. As this AVS/AHV numbers were not part of the surveys, they had to be identified on the basis of the name, surname and date of birth of the respondents. For part of the sample, on average 8%, no linkage could be carried out because of the non-identification of the AVS/AHV number. With the integration of the AVS/AHV number as standard identifier in registers and surveys, this no linkage percentage is now almost non-existent.

The AVS/AHV number is only used for the linkage with the registers stage. All data processing is carried out with **pseudonymised data**.

A second challenge during the SESAM project was linked to the content of the variables of administrative registers. Their documentation did not at all correspond to **metadata** established for a statistical aim.

4 Recent developments

The introduction of the AVS number as a standard identifier following the Register harmonisation Act of 2006 has increased the number of matching possibilities for LFS data. The FSO receives several requests supplementary to SESAM or carries out matching itself. Matching enables both analysis and the quality of the survey variables to be studied. The matching of LFS data and data from the Swiss Earnings Structure Survey is thus underway. The aim of this is to study the coherence of the codification of the professions.