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Session 9: Implementing scanner data

New data sources to compile price indices: small scale “big data” for the index compilation

Kristiina Nieminen, Statistics Finland

In recent years several countries have started to modernise their data collection for CPI by utilising scanner data. Statistics Finland’s long term target is to collect the prices, quantities and descriptive information of consumer products for all needed periods instead of just collecting a sample of the representative commodities. In short term, the first obtained scanner data is received from the Pharmaceutical Information Centre Ltd. The company’s information-hub contains reliable and up-to-date sales and price information of medicines.

The first part of the paper explains how the scanner data of pharmaceutical products is processed and which are the main improvements done in the process. Based on our experience, this process-flow approach guarantees the transparency of the process and confirms easy access to the used methods and index formula. Examples of these new practices and the process flow will be described in short. In future, statisticians maintain and update the process flow, thus enabling more fluent adaption of the new data sources to the CPI production.

The second part describes the results of using the new data sources which shows substantive quality improvement in this specific commodity group. Different index formulas were tested in co-operation with the University of Helsinki/Department of Political and Economic Studies (professor Yrjö Vartia). These findings are described briefly.

The last part of the paper raises ideas for further development of using scanner data in statistical processes.