

Quality of data derived from administrative sources

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Quality in official statistics

- Definition of quality in statistics according to European “Code of practice”
- Product quality
 - Relevance
 - Accuracy
 - Timeliness and punctuality
 - Comparability and coherence
 - Accessibility and clarity
- Process quality
 - Best methods
 - Cost efficiency
 - Low response burden

Data collection methods

Options

- Census/full coverage statistical survey
- Sample survey
- Administrative registers

Administrative data are collected for administrative purposes

- Register-based statistics is secondary use of existing data

Decision on data collection method is a compromise between

- Cost efficiency
- Response burden
- Product quality

Costs

Current situation in many countries

- The NSIs have experienced budget cuts / restrictions
- Users demand new and more detailed statistics
- Must increase efficiency in production of statistics

Administrative data

- Almost no costs for data collection (for the NSI)
- Use resources on improving existing data instead of collecting data for statistical purposes
 - Supplement and correct existing data
 - Most resources used in establishing register-based statistical systems
 - But: systems must be maintained

Register-based statistics is not free of charge but normally less expensive than sample surveys and especially than traditional censuses

Response burden

Use of administrative data means no additional response burden

- For companies
 - “Reporting to authorities takes too much time”
- For citizens
 - “The authorities should not ask for information that I have already given”
- For the NSI
 - Increasing non-response problems in sample surveys and censuses

Register-based statistics compared to statistical surveys (1)

- Costs (++)
- Response burden (++)
- Relevance (-)
 - Not all variables are included in registers
 - Less direct control over data content
- Accuracy (o)
- Timeliness (-)

Register-based statistics compared to statistical surveys (2)

Administrative registers offer

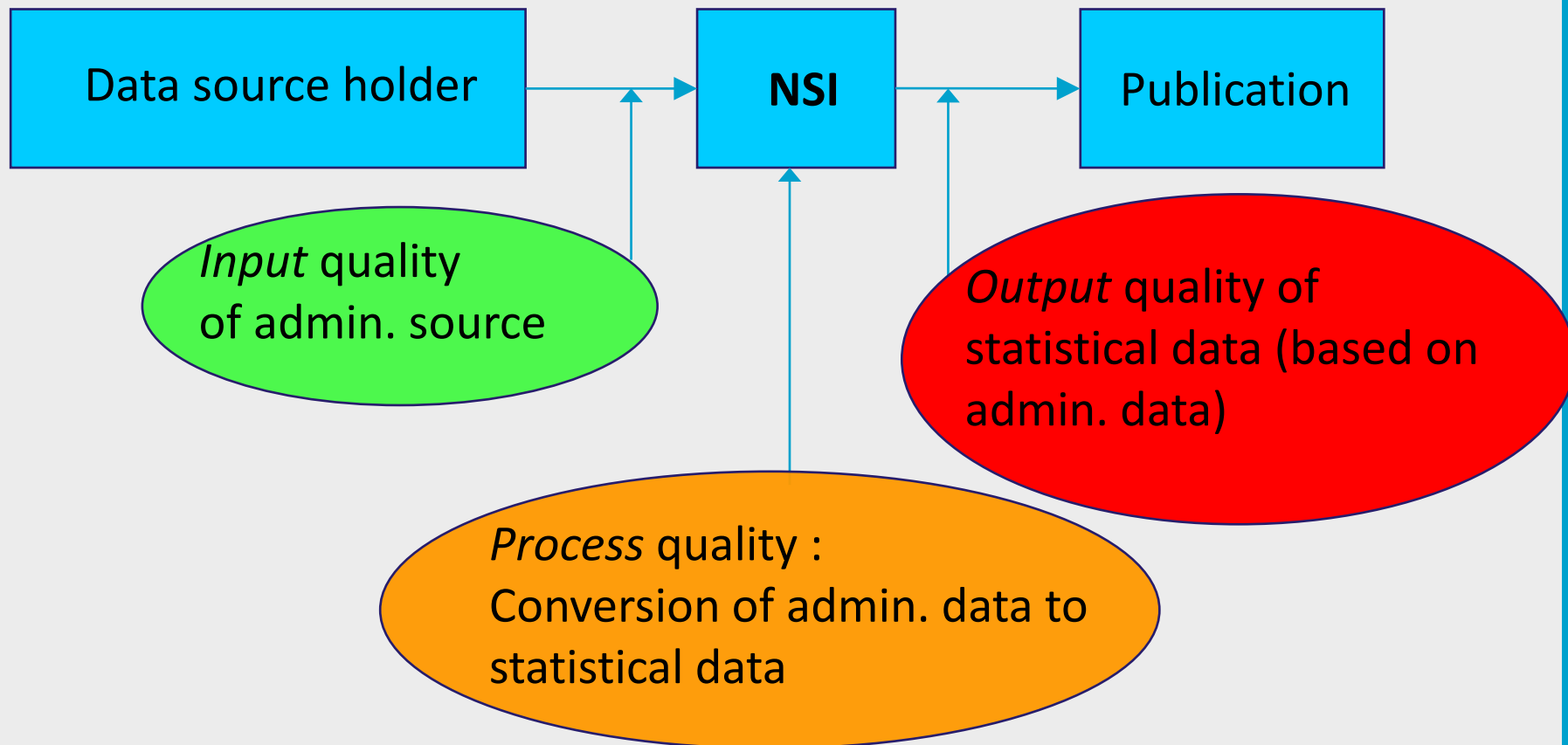
- Total coverage at a low cost
 - Statistics for small groups possible (compared to sample surveys)
- Annual (or more frequent) data for all variables
 - Annual “censuses”
- To produce statistics based on administrative data has proved to be efficient
- Register-based statistics have to be supplemented by information from sample surveys

Increasing role of administrative data in the statistical process

- More and more statistical institutes are using administrative sources for statistical purposes
 - Mainly to decrease costs and response burden

- However, as a result they:
 1. Become more *dependent* on data sources collected and maintained by *others*
 - Need to monitor the *quality* of those data sources when they *enter* the office
 2. Have to find new data sources that contain the information needed
 - Need to evaluate the usability of those data sources *prior* to use

Quality, administrative data, and the statistical process



Conclusions

- Quality of official statistics is an important aspect, especially when use is made of integrated data
- The register-based census has proved to be a successful concept in the Netherlands
- The quality framework (source, metadata, data) is a useful tool for making data decisions in the virtual census
- Follow-up: the Education Register has been improved (including newer data and foreign and private education) and is being used in the Census 2021

More information

Daas, P., E. Schulte Nordholt, M. Tennekes and S. Ossen, 2021. Evaluation of the Quality of Administrative Data Used in the Dutch Virtual Census. In: Administrative Records for Survey Methodology, Wiley Online Library, 2021, pp. 63-83.

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