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GeoSpatial and administrative data for research purposes

Uldis Ainārs
CSB of Latvia



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Advanced methods

Mārtiņš mentioned Riga, 1999

London, England in 1854.

Cholera outbreak,
which **killed 616 people**

John Snow visualized individual death cases



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«Georeferenced» individual death cases, John Snow





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Advanced methods

Cholera outbreak, which **killed 616 people**

Doing analysis

John Snow proved his hypothesis that contaminated water, not air, spread cholera





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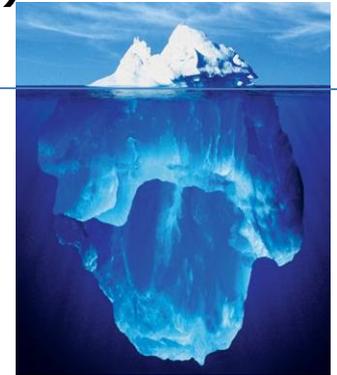
Back to future

Classical statistical output – value added by CSB

- CPI, GDP
- Population figures, f(adm. sources)
- Wage statistics (survey + adm. sources)

Raw data – value added by data scientist

- Survey data,
- Administrative sources,
- Combined mode (joined by ID, personal, enterprise, address)





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Latest research projects based on 'raw data'

Latvijas Banka
(Central Bank)

- *Aim: Competitiveness of enterprises and other.*
Data sources: Statistical surveys, SRS data.

Ministry of Health
(subc. World Bank)

- *Aim: Evaluation of Healthcare system*
Data sources: Population census 2011, linked with health care data.

Ministry of Finance
(subc. World Bank)

- *Aim: Evaluate Equity and Efficiency of the Latvian Tax System*
Data sources: EU SILC, LFS, HBS + SRS income.

University of Latvia

- *Aim: Migration and mobility*
Data sources: Population census 2000 & 2011.



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Ongoing research projects and

World Bank

- *Aim: Poverty mapping*
Data sources: Pop.census 2011, EU-SILC, HBS, SRS

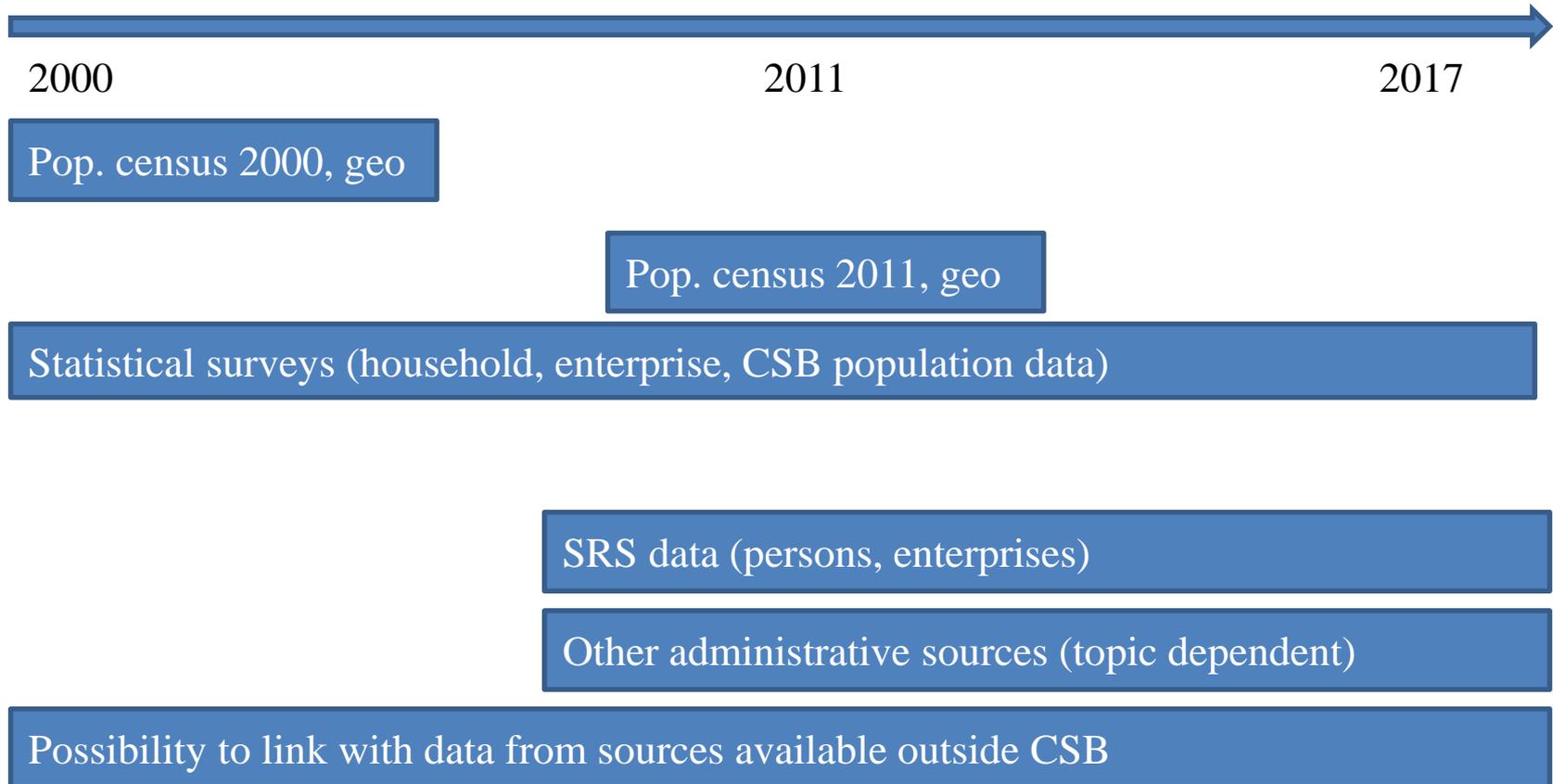
University of Latvia,
(data preparation
stage)

- *Aim: Migration and mobility*
Data sources: Population census 2000, 2011 (georeferenced), place of residence at 01.01.2016, building data from land cadaster, SRS income data,



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Datasets for research purposes





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Datasets for research purposes

No universal dataset which will fit every research

Discussion with researcher on aims and available data

Selection of data sources and linking

Mode of access (remote versus offsite)

Formal procedure (contract, confidentiality commitment)

Data available for researcher



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Statistical data versus administrative data

- Harmonization
 - Important (LFS, EU-SILC) statistical surveys are harmonized among countries
 - Administrative data – dependent from national legislation
- Support and documentation
 - For NSI is challenging to provide support for administrative data, requires extensive cooperation with data provides
 - Changes in legal framework leads to changes in adm. data (tax optimization)



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Way forward

Cooperation among

- data providers (CSB, holder of adm. registers)
- policy makers (local governments)
- research community



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Uldis.Ainars@csb.gov.lv

67366920