

STATISTIČNI URAD REPUBLIKE SLOVENIJE STATISTICAL OFFICE OF THE REPUBLIC OF SLOVENIA



THE SLOVENIAN NATIONAL STATISTICS TRUSTWORTHY AND USER-ORIENTED

New developments in Slovenia:

Microsimulation economic models

Polona ŠTREKELJ Head of Data Protection Committee SORS



Starting point (research environment):

- extended need for detailed data
- extended need for immedietately prepared data
- reforms taking place (crisis)
- reforms require precise and structured data
- results need to be refleceted in legal acts
- political decisions (legal acts) need to be assessed

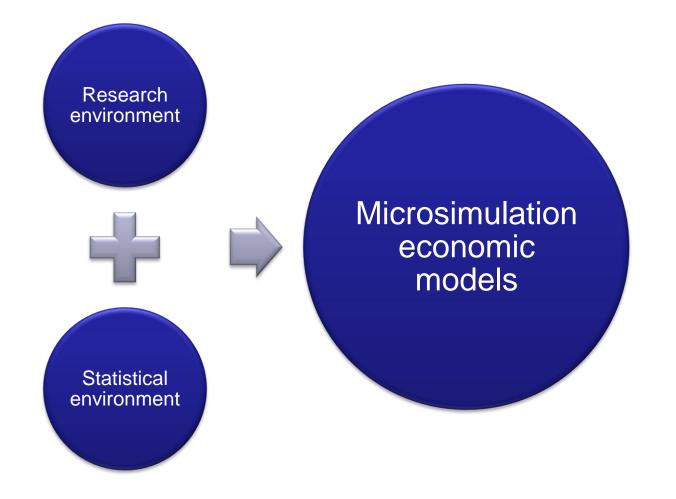


Starting point (statistical environment)

- Statistical function (not only aggregated data, also supporting research community - Principles and Guidelines of Good practice, 2007)
- In statistical offices all relevant data at one point (no add. administrative burden, quality of administrative data required)
- Statistical users general and more specific (all is statistical purpose!)
- Legal mandate for research



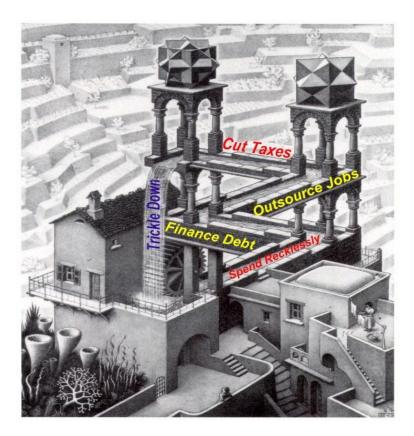
Research env. – Statistical env.?





Economic model

A theoretical construct that represents economic processes by a set of variables and a set of logical and/or quantitative relationships between them. The economic model is a simplified framework designed to illustrate complex processes, often but not always using mathematical techniques.





Pre-conditons

- Clear legal mandate for administrative data
- Quality of administrative data
- Data need to be structured and matchable
- Clear legal mandate for researchers
- Acces facilities
- Statistical confidentiality (SDC)



How was done in Slovenia?

- Legal mandate for collecting administrative data (Article 32 of National Statistics Act) all administrative records, without any costs
- Quality of administrative data (Article 28 of NSA) opinion of SORS when setting up new/changing administrative source
- Structured and matchable data (Article 28 of NSA) opinion of SORS
- Access facilities (safe room, remote access) equipped with a proper analytical software (STATA, SAS, SPSS, Microsoft)
- Statistical confidentiality of crucial point secure access facilities, output checking (SDC) done by SORS



Microsimulation model on social data (1)

- started in 2009
- run by the Institute for Economic Research (IER)
- used for analyses and preparation of expertise as a basis for structural reforms on tax and social transfers field
- <u>administrative data</u>: 13 registers (population and households register, property register, tax, health, pensions, social transfers, (un)employment data; <u>statistical data</u>: population census, student surveys, employment surveys
- sample based model (112.000 units)
- SORS + IER both involved in preparation of data with administrative institutions (agreement with each institution)
- access to data both in <u>secure room</u> and <u>remote</u> (a contract between SORS and IER)



Microsimulation model on social data (2)

- co financing of analitycal software by IER (Stata)
- other institutions using model: Ministry of finance, Institute of Macroeconomic Analyses and Development, Ministry of labour, family and social affairs, Ministry of education, science, culture and sport, Ministry of health



Microsimulation model on tax of legal entities income

- preparatory work started in 2011
- run by IER
- used for analyses of tax impact on innovations in public entities
- <u>administrative data</u>: final accounts, data on legal entities, tax data; <u>statistical data</u>: innovation surveys, R&D surveys;
- SORS + IER both involved in preparation of data with administrative institutions (agreement with each institution)
- access to data both in <u>secure room</u> and <u>remote</u> (a contract between SORS and IER)
- analytical software used: STATA, Microsoft



Next steps

- structural reforms taking place in Slovenia (pension reform, health reform, flexicurity)
- more microsimulation models needed
- SORS needs to be prepared (investments in secure room and remote access – up-grading analytical software, co-operation with researchers regarding financing, SDC to be more automatic)



Conclusions

- statistical data (statistical function) promotion
- results implemented in legal acts (public good)
- feedback of quality of data (methodologies) from researchers