

Quality of register based census in Lithuania



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Quality of register-based census

Particularly difficult to assess due to the complexity and multi-dimensionality of the data used

- **Input data quality** - Quality of raw administrative data sources
- **Output data quality** - Quality of results, based on administrative data sources
- **Post-enumeration survey**
 - census data were merged with surveys data at micro level: Employment survey, Income and living conditions survey, IT usage in households survey

Quality of register-based census

Registers are constructed for administration purposes but not statistical

- If quality of input data is perfect, quality of output data still can be poor
- If quality of input data is poor it still can improve the quality of output data

Guidelines for Assessing the Quality of Administrative Sources for Use in Censuses (UNECE)

Some Lithuanian examples

- **Register of diplomas:**

- **Input data quality – good** (all Lithuanian schools provides data on issued diplomas, data are complete and in due time)
- **Output data quality – poor** (register starts from 2004, diplomas received abroad not always available)
- To improve the quality of the results - Census 2011 data and a number of other registers and are combined, also imputation applied for those who are older than 40 but was not in Census 2011.

- **Social Insurance register:**

- **Input data quality – perfect** (wrong data are subject to huge fines)
- **Output data quality – some categories are perfect while others has significant shortcomings** (self-employed)
- To improve the quality of the results - Income declaration data are combined to identify active self-employed

Input data quality

Input data quality (Quality of raw administrative data sources)

- [Quality guidelines for administrative data - prepared and approved in 2021](#)
- 47 Quality indicators and 17 dimensions and
- Based on GSBPM model, Eurostat recommendations, other countries experience

Output data quality

Output data quality (Quality of results, based on administrative data sources)

- Always described in metadata files:
 - [Population](#)
 - [Households](#)
 - [Dwellings and buildings](#)
- Quality indicators for statistics produces on the basis of administrative data sources – still under development

Comparison of definitions

Census variable	Census Definitions	Definitions in Register	Difference
Place of usual residence (address)	'usual residence' shall mean the place where a person normally spends the daily period of rest, regardless of temporary absences	Population Register: Declared place of residence	<p>It is required by law to declare the place of residence in Lithuania, but it is not required to live at the declared address.</p> <p>For EU citizens declaration is required if they stay for 6 month and longer. Citizens of other countries needs declaration immediately (non-tourists).</p> <p>Declared place of residence available for about 80% of population. Elderly people and babies as well as rural regions are often subject to missing data.</p>
Age	Number of year	Population register: Date of birth	Definitions are the same. Data 100% complete.
Occupation	Occupation	Social Insurance: Occupation Tax Inspectorate: Permit to conduct a certain activity Farmers register: declaration of certain Etc.	<p>Definition the same but available only for employees.</p> <p>An algorithm created how to get occupation from Tax Inspectorate data.</p> <p>An algorithm created how to determine activity according to crops grown at farm.c.</p>

Availability of census variables in different registers

Administrative data source	Census Variables					
	Sex	Age	Education	Employment status	Address	
Population Register	x	x			x	
Register of diplomas			x			
Labor Exchange office			X	X		
Social Insurance				X		
Tax Inspectorate				X		
Public servants register			x	x		
Real Estate Register					x	

More information

<https://osp.stat.gov.lt/gyventoju-ir-bustu-surasymai1>



Official Statistics Portal



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Home > All indicators > Censuses > Population and Housing Census

Census 2021



Census 2011



Census 2001

