PRODUCTION OF INTERNATIONAL MIGRATION STATISTICS IN STATISTICS LITHUANIA

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Statistics Lithuania
OVERVIEW

- General information
- Undeclared emigration surveys 2006-2009
- Inter-census revision of migration flows
- Pilot study of undeclared migration
- Conclusions. Future plans
GENERAL INFORMATION 2013

Population 2.9 million
Total area 65.3 thous. km²

Life expectancy,
- Males 68.5 years
- Females 79.4 years

Natural population change
- Live births 29.6 thous.
- Deaths 41.5 thous.

Citizens of Republic of Lithuania 99.2 per cent

In 2004–2013,
- Emigrants 440 thous.
- Immigrant 107 thous.
- Net international migration -332 thous.
CRUDE NET INTERNATIONAL MIGRATION RATE
EU MEMBER STATES, 2013

Per 1000 population

- Italy
- Luxembourg
- Malta
- Sweden
- Austria
- Germany
- Denmark
- Finland
- United Kingdom*
- Belgium*
- Netherlands
- Hungary*
- France*
- Slovakia
- Slovenia
- Czech Republic
- Bulgaria
- Romania*
- Poland
- Croatia*
- Estonia
- Portugal*
- Greece*
- Spain*
- Ireland*
- LITHUANIA
- Latvia
- Cyprus*

Eurostat’s database, 18 August 2014

* Provisional data

**Emigration** is the departure from a country with the intention to take up permanent residence in another country or for a period longer than 12 months.

**Immigration** is the arrival in a country with the intention to take up permanent residence or for a period longer than 12 months.
DATA SOURCES: THE RESIDENTS‘ REGISTER

- Data from the central database of the Residents‘ Register Service under the Ministry of the Interior of the Republic of the Lithuania;
- The main data source – data on declaration of the change of place of residence;
- Data of the Residents‘ Register have a legal value and are based on the personal documents;
- Data are provided to Statistics Lithuania according to an agreement;
- The updated personal data are received daily online;
- Statistical personal data are formed according to the Specification (the selection criteria of Residents‘ Register and other administrative data sources), which is prepared following the approved Methodology on International Migration Statistics;
- The personal ID code is used for the integration of the data of the Residents‘ Register into other databases.
DATA SOURCES:
STATE SOCIAL INSURANCE FUND’S BOARD DB
STATISTICAL BUSINESS REGISTER
FOREIGNERS REGISTER

- Personal data (beginning and end of employment) from the database of the State Social Insurance Fund’s Board – to measure the employment of emigrants before emigration.
- Data from the Statistical Business Register – to measure the employment of emigrants before emigration by economic activity of the previous workplace.
- Data from Foreigners Register – for more data about the immigration of the citizens of EU member states.
INTERNATIONAL MIGRATION STATISTICS PRODUCTION PROCESS IN LITHUANIA

- List of respondents
  - Household survey
    - 2011 Population and Housing Census Database
  - Administrative Data (Residents’ Register, State Social Insurance Fund Board)

  Processing of entries, data analysis
  - Migrants who have declared their migration (primary statistical data)
  - Migrants who have not declared their migration (primary statistical data)

  Calculation of estimates
  - Migrants according actual stay in the country
  - Production of statistical information

  Analysis of results, conclusions

Dissemination

International migration statistics

8-9 September, 2014, Chisinau, Moldova

UNECE, CES, Workshop on Migration Statistics
UNDECLARED EMIGRATION SURVEYS

• Annual household survey, I quarter in 2006-2009

• Aim of the survey
Estimated number of undeclared emigrants and their characteristics

• Framework
EU Labour Force Survey (LFS) by supplementing module on undeclared migration;

• Questionnaire
Questions for household members about person who emigrated:
  Age, sex; educational attainment; occupation before leaving; current status (worker, student, other); new country of residence; how many years /months ago she/he left Lithuania; reason for emigration (work, studies, family reasons, other reasons).

• One-stage simple random size, sampling frame – Residents’ Register;

8-9 September, 2014, Chisinau, Moldova
UNECE, CES, Workshop on Migration Statistics
RESULTS OF UNDECLARED EMIGRATION SURVEYS

Only each second-third emigrant declared his / her departure from Lithuania. Coefficient of variation for the number of emigrants who had not declared their departure ranged about 15 percent.

In 2010, the obligation was laid down in the Law on Health Insurance of the Republic of Lithuania for permanent residents to pay compulsory health insurance contributions.

Since the year 2010 the Undeclared emigration survey has been terminated.
INTER-CENSUS REVISIONS IN LITHUANIA

2011 Lithuanian Population and Household Census (Population Census) Results

• More than 60 thousand persons should be enumerated as undeclared emigrants additionally;
• Population structure has been changed.

Inter-census revisions done

• Number of emigrants by different breakdowns (total, sex, age, year of emigration, and etc.);
• Number of live births who born abroad;
• Population number by different breakdowns.
INTER-CENSUS REVISION OF EMIGRATION FLOWS IN LITHUANIA

Population Register, Foreigners’ Register

Selection criteria

Demographic Database: annual emigration file

Comparison of emigrants with Census data and Undeclared emigration surveys. Estimation using survey sampling methods.

Undeclared emigration surveys

2011 Population Census Database

Recalculated number of emigrants

Longitudinal migration data
INTER-CENSUS REVISION

• 1 STEP
Using Population Census results, Population annual data, Emigration annual data, Undeclared emigration survey number of emigrants (total, by sex in urban / rural areas) had been revised

• 2 STEP
2001-2011 Emigration / immigration data files were merged into longitudinal migration database.
Distribution of immigrants by different year of emigration was estimated.

• 3 STEP
From Population Census database return migrants were selected (the year of immigration known).
The year of emigration had been estimated according distribution in 2 Step.

• 4 STEP
Persons with the same year of emigration made sample. Survey sampling design were used. Calibrated weights were calculated.
The number of emigrants by age and sex in municipalities were estimated.
DECLARED AND REVISED NON-DECLARED EMIGRATION FLOWS

8-9 September, 2014, Chisinau, Moldova

UNECE, CES, Workshop on Migration Statistics
Aim of the study
Estimation of existence of undeclared migration

Population frame
All Lithuanian usual resident population

Study variable
Persons selected from Residents’ Register who participated/not participated in EU Labour Force Survey
**STUDY VARIABLES**

**Undeclared emigrants** are persons who has not declared their departure from the country and their usual place of residence in a country or their intending to stay in another country for a period 12 months or longer.

**Undeclared immigrant** are persons who has not declared their arrival to the country and their usual place of residence in a country or their intending to stay in country for a period 12 months or longer.

[Diagram showing flow of Lithuanian usually resident population, undeclared emigrants, and undeclared immigrants.]
LONGITUDINAL DATABASE

- Sample size – 22.5 thousand

The personal ID number was used for preparation of longitudinal database of LFS 2010 III quarter - 2013 I quarter data.

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SCHEME OF ESTIMATION

- LFS longitudinal database
- Residents’ Register database
- 2011 Population Census database
- Demographic statistics database
- State Social Insurance Fund Board database

Data linking, Data processing

- Undeclared emigrants
- Usually resident population
- Undeclared immigrants
Criteria for selection of UNDECLARED EMIGRANTS

- Person has not participated in LFS survey 4 quarters. Reasons for non-response: person was leaving abroad;
- Person was in Residents’ Register (on the Census reference date);
- Person participated in Population Census;
- Person has not declared his/her departure from the country;
- Person has not been working officially during the 1-2 years.

Criteria for selection of UNDECLARED IMMIGRANTS

- Person participated in LFS survey 4 quarters;
- Person wasn’t in Residents’ Register (on the Census reference date);
- Person did not participate in Population Census;
- Person has not declared his/her arrival to the country.
Criteria for selection of USUAL RESIDENT PERSONS

- Person participated in LFS survey or person did not participated in LFS survey with other reasons for non-response;
- Person was in Residents’ Register (on the Census date);
- Person participated in Population Census;
- Person has declared his/her arrival to the country or his/her intending to stay in country for a period 12 months or longer after Census date;
- Person who was born after Census date.
ESTIMATION METHOD

• Generalized Regression Estimator

• Auxiliary variables
  population number by counties
  breakdown of population by sex
  age groups

• Quality measure of estimators
  Coefficient of variation (%)
### PILOT STUDY RESULTS

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<th>Estimators, thous.</th>
<th>Coefficient of variation (%)</th>
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<tr>
<td>Undeclared emigrants, 2011</td>
<td>8.6</td>
<td>15.9</td>
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<td>Males</td>
<td>5.4</td>
<td>17.9</td>
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<td>Females</td>
<td>3.2</td>
<td>22.9</td>
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<td>Undeclared immigrants, 2011</td>
<td>1.3</td>
<td>60.7</td>
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CONCLUSIONS. FUTURE PLANS

• The pilot study results about undeclared migrants are not very reliable for making deepest analysis. The methodology of estimation of undeclared migration should be improved and the studies of undeclared migration should be continued.

• Till 2016, the implementation of the Regulation (EU) No 1260/2013 on European demographic statistics remains the top priority for Statistics Lithuania.

• Longitudinal migration data analysis will be continued for the estimation of the return migrants’ behaviour pattern and their demographic characteristics. The results will be presented for the users.
Thank you for your attention!

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