Methodology & Challenges in Producing Global Estimates on International Migrant Workers

Natalia Popova

Vijay Verma

Agenda

- Introduction

- Construction of standard templates for UN and ILO databases

- UN Population database

- UN Migration database

- ILO Labour Force database for 2015 and 2016

- Indicative number of migrant workers

- Ratio of migrant to general population LFPR

- Conclusion

Introduction

Construction of the 2015 Global and Regional Estimates by the ILO

1. Construction of the input data file in a standardized form
2. Imputation, adjustments for consistency, aggregation and production of global and regional estimates.

Main differences between last and new estimation procedures

1. Confined to migrant workers.
2. Construct benchmark data on:
   - population size,
   - number of migrants,
   - number of workers at the level of individual country or subnational territory.
3. Define target population more clearly and uniformly.
4. Procedure for moving from migrants and all workers to migrant workers is more robust and precise.

Objective:

- To briefly describe the new estimation methodology for constructing ILO Global Estimates on Migrant Workers

Construction of Standard Templates

- Based on three sets of benchmark data, which are assumed to be complete and correct at the individual country level:
    1. UN population database
    2. UN database on stock of international migration for 2015
    3. ILO labour force database (ILOSTAT) for 2015 and 2016

- Quality affected by their completeness and comparability across countries.

- Global estimation procedure:
    1. Create a standard (ILO) list of countries/territories along with ILO regions and income level groups – basic template.
    2. Substantive data can then be uniformly put into the basic template

UN Population Database

Construction of the database involved:

1. Standard template creation including population data by sex and 10-year age group
2. Augmentation of numbers by adding the number of refugees
3. Extrapolation of UN population data from 2015 to 2016 using ILOSTAT database

Output – a set of templates, each covering the same list of countries/ territories providing the following factors:

$$UN\_Working - age\ population_{2016} = UN\_Working - age\ population_{2015} * \left(\frac{ILO\_Working-age\ population_{2016}}{ILO\_Working-age\ population_{2015}}\right)$$

UN Migration Database

Includes two datasets in 2015 by sex and age group

- Number of migrants
- Base population

Steps for consolidation

1. Consolidating 2015 migration datasets
2. Adding data on refugee stock
3. Reducing the effect of differences in the definition of 'migrant' used

Output – consistent set of migration rates by country/territory and sex‑age

$$\text{Migration rate}_{2015} = \frac{\text{Number of working} - \text{age migrants}_{2015}}{\text{Total migrant working} - \text{age population}_{2015}}$$

$$\text{Number of working} - \text{age migrants}_{2016} = \text{Working} - \text{age population}_{2015} * \text{migration rate}_{2015}$$

ILO Labour Force Database

Includes two datasets for 2015 and 2016 by 10-year age-groups and sex
- Total population
- Numbers in the labour force

Matching by country name is facilitated due to consistency of datasets

Output – the labour force participation rate by country/territory and sex and age-group

$$Labour\ force\ participation\ rate_{2016} = \frac{Number\ in\ the\ labour\ force_{2016}}{Working-age\ population_{2016}}$$

$$Number\ in\ the\ labour\ force = Working-age\ population_{2016} * Labour\ force\ participation\ rate_{2016}$$

Indicative number of migrant workers

- Provides a strong basis for later estimation of the actual number of migrant workers.

Output - the number of migrant workers under the hypothetical assumption that the labour force participation rate for migrants is the same as that of the general population, a given country and sex-age group.

Indicative number of migrant workers
$$= Working - age\ population_{2016} * Migration\ rate_{2015}$$
$$* Labour\ force\ participation\ rate_{2016}$$

Ratio of migrant to general population LFPR

Two main tasks:

1. Compilation from diverse data sources
   - Reasonable estimations of **R** are not likely at the level of individual countries/territories.

2. Imputation for missing data
   - By sex, age and region – information may be incomplete and only available for a subset of countries

Expectation: **R** is somewhat larger, but still close to 1.0

$$\text{Actual number of migrant workers} = \text{Indicative number of migrant workers} * \frac{\text{LFPR}_{\text{migrants}}}{\text{LFPR}_{\text{population}}}$$

$$= \text{Indicative number of migrant workers} * R(\text{say})$$

$$= [\text{Working} - \text{age population}_{2016} * \text{Migration rate}_{2015} * \text{LFPR}_{2016}] * R$$

Conclusion

- It may not be possible to obtain enough empirical data for estimating the distribution of migrant workers according to major sector of activity.

- Concerted effort is needed towards obtaining more complete and up-to-date data measures of distribution of migrant workers by sector of activity.

Thank you for your attention!