Measuring Stocks and Flows in Different Data Collection Systems

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Data collection systems

Depending on main data sources used for measuring stocks and flows, data collection systems might be classified

Field-based data collection

Population Censuses and Surveys

Fully administrative registers/records

Population register and other registers/records

Combination of fieldbased and registers/records

POPULATION CENSUSES + Surveys

Resident population STOCKS

Immigration

Population censuses provide rough estimates of FLOWS



- Foreign-born
- Foreign-citizen
- Foreign-born foreigncitizen
- Return migrants

previous country of residence and year/month of arrival

CITIZENS

Foreign-born

Native-born

FOREIGN CITIZENS

Foreign-born

Native-born

Emigration ?



Population censuses do not produce reliable data for FLOWS

✓ Detailed information for STOCKS

- Foreign-born population
- Foreign-citizen population
- Foreign-born foreign-citizen population
- Return migrants

SURVEYS

 Estimates of STOCKS and FLOWS for the intercensal period

POPULATION CENSUSES + Surveys

Main quality concerns

- ✓ Alignment between the resident population and flows
- ✓ Flexibility in adoption of international recommendations
- ✓ Coherence in the definitions of resident population and international migration across censuses and surveys

10 years census interval

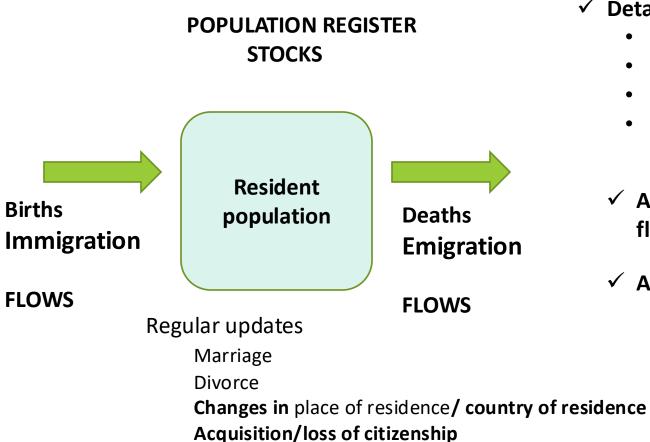
Potential under-coverage of refugees and undocumented migrants

Increasing non-response/refusal

Complexity of questions on international migration

Lack of data collection/ dissemination
By country of birth/citizenship

FULLY ADMINISTRATIVE REGISTERS/RECORDS



- ✓ Detailed information for STOCKS and FLOWS
 - Foreign-born population
 - Foreign-citizen population
 - Foreign-born foreign-citizen population
 - Return migrants
 - ✓ Annual/quarterly dissemination of stocks and flows
 - ✓ Alignment between stocks and flows

Definition of the population registered ≠ the definition of the resident population

FULLY ADMINISTRATIVE REGISTERS/RECORDS

Main quality concerns

Citizens

- Overcount Stocks of citizens living in the country
- Undercount → Flows of emigrants

"Signs of Life" method to validate citizens living in the country

by integrating population register with other register data

Foreign citizens

- Undercount → Stocks of foreign citizens living in the country
 Undocumented migrants
- Undercount → Flows of foreign citizens
 Entering the country as visitors
 or without any documents

Estimation of undocumented migrants – surveys, estimates of the share of undocumented (mobile phone data, resident/work permits)

Analysis of border records by integrating arrivals and departures and analysis of mobile phone data for foreign citizens

COMBINATION OF POPULATION CENSUSES AND ADMINISTRATIVE REGISTERS/RECORDS

Estimates of the stocks of four population groups

Population censuses

Resident Population STOCKS

CITIZENS

Foreignborn Nativeborn



Foreignborn Nativeborn



Residence/work permits

Border records

Refugees and asylum seekers

Immigration/
Emigration
estimates by
years

FLOWS

Acquisition/loss of citizenship

Birth records by citizens/foreign citizens and by nativeborn/foreign-born

Deaths records by citizens/foreign citizens and by native-born/foreign-born

COMBINATION OF POPULATION CENSUSES AND ADMINISTRATIVE REGISTERS/RECORDS

Main quality concerns	
	Misalignment of the resident population (stocks of international migrants) with international migration flows ☐ Different data sources are used for stocks and flows - A set of rules might be developed to align migration flows as closely as possible to the definition of residence population
	Complications in estimating the flows when various data sources are used - Migration information system (for foreign citizens only) would provide more reliable and frequent data
	Double records when macro integration is used -linking individual records using unique identifier for foreign citizens will improve the data quality

Conclusions

- □ Collecting data for international migration is a complicated process
 - Different forms of migration
 - Variety of data sources available that provide partial information or information for specific migrant groups
 - All sources have its own pros and cons
- ☐ Use of administrative data sources will improve the quality, availability and timeliness of migration statistics
 - Assessment of the quality and content of administrative registers/records
 - Improving the technical capacity for data linkage
- Estimation methods for migrant groups that are difficult to measure
 - Undocumented migrants
 - Citizens living abroad
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