Migration Analysis

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Introduction cont'd

- In this part of the workshop we look at sources and measurement of net migration,
- We will cover:
  - Definitions and key concepts
  - Sources of migration data
  - Indirect and direct measurement of internal migration for projection

Key Concepts and Definitions

- Migration
  - Form of spatial mobility involving change of usual residence between clearly defined geographical units
  - Some change of residence are temporary or short time and do not involve change of usual residence e.g. visitation, work, business
  - Other changes in residence may permanent but short distance

Types of migration

- International – Movement across national boundaries
  - Emigration- moving out
  - Immigration – coming in from another country
  - Note also distinction of by permanent and temporary, legal vs illegal
- Internal –movement within boundaries of a country
  - Other types classification of internal migration – rural to rural, rural to urban, urban – rural and urban to urban

Rationale

•Often considered the least important component of population change in some countries,
•While in others migration may be as important as, or more important than, fertility and mortality in determining population change.
•These are countries are those with substantial circular labor migration flows (whether as sending or host country) or longer term flows.
•They may be destination countries like the U.S. or major migrant-origin countries like Iran, or
•both sending and receiving countries, like Thailand.

- For countries with substantial net international migration, the size, composition, growth and distribution of population is affected by that migration.
- Future population growth and characteristics are also affected.
- For sub-national projections, migration plays an especially important role in defining future population distribution.

Measuring Migration

The utility of migration data to the demographer depends on the question(s) to be answered, the type of migration data available, and the representativeness of those data.

Measuring International Migration

- Migration data are available from censuses (from questions about:
  - Birthplace,
  - Residence at a previous date, (or place of previous residence) and
  - Duration of residence
- Arrivals and departures data published in statistical yearbooks, as estimates from dedicated statistical databases and,
- Population registers (only few countries)
- Refugee statistics are available from the United Nations High Commissioner for Refugees (UNHCR) and other sources.

Types of Migration Data for Direct Estimation Kenyan Censuses

Type	Description	Questions	Method
Lifetime (Kenya P-18)	Change of residence since birth	Place of birth and place of current residence only	Cross tab place of birth by place of current residence
Migration during past 12 months or another fixed reference period (Kenya P-19)	Change of residence during past year	Where was person living 12 months ago?	Cross tab place current residence with place of residence 12 months ago

Types of Migration Data for Direct Estimation

Type	Description	Questions	Methodology
Duration of residence (Kenya P-20 and P21) Least used in the last 2009 and 1999 censuses; first asked in 1999	Focus on latest migration only	1.How long lived in current residence, and 2.Previous residence	Identify non movers and movers; cross tabulate for each region by age and sex movers by duration of residence

Types of Migration Data for Direct Estimation

Type	Strengths and weaknesses
Lifetime	Provides some idea of flows, but truly useful only with multiple censuses and then only by calculating differences in cohort or subpopulation size after adjusting for mortality and under enumeration. Not a good substitute for migration measured using a question on a fixed reference period.
Migration during past 12 months	Excellent measure but migration may be exaggerated by recent events.
Migration during past 5 years	Excellent measure providing picture of movement over past 5 years. A major weakness of this and other measures is its asymmetry for measuring international migration. Out-migrants are typically not counted well.

Measuring international migration (indirect estimation)

- Net international migration also can be estimated as a residual, comparing two foreign born populations by age and sex from successive censuses. Ignoring outflow of the citizen (Kenya-born) population

Measuring international migration (indirect estimation)

Provincial population by age and sex

0-4
5-9
…
75-80
80+

Intercensal life table survival ratios

S(x+5,x)/S(x+5,x)

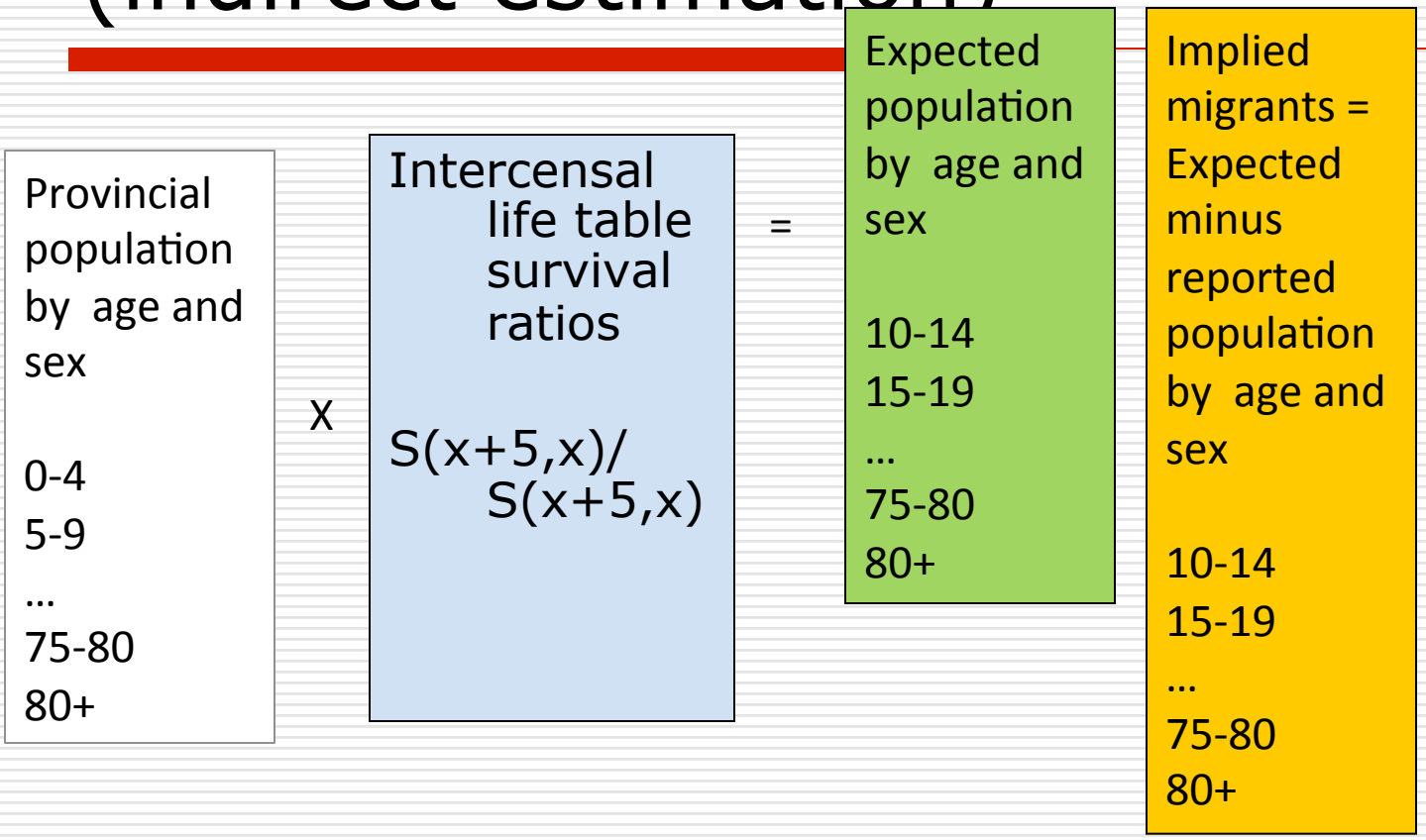
=

- Expected population by age and sex
  - 10-14
  - 15-19
  - …
  - 75-80
  - 80+

Implied migrants = Expected minus reported population by age and sex

10-14
15-19
…
75-80
80+

Measuring international migration (indirect estimation)

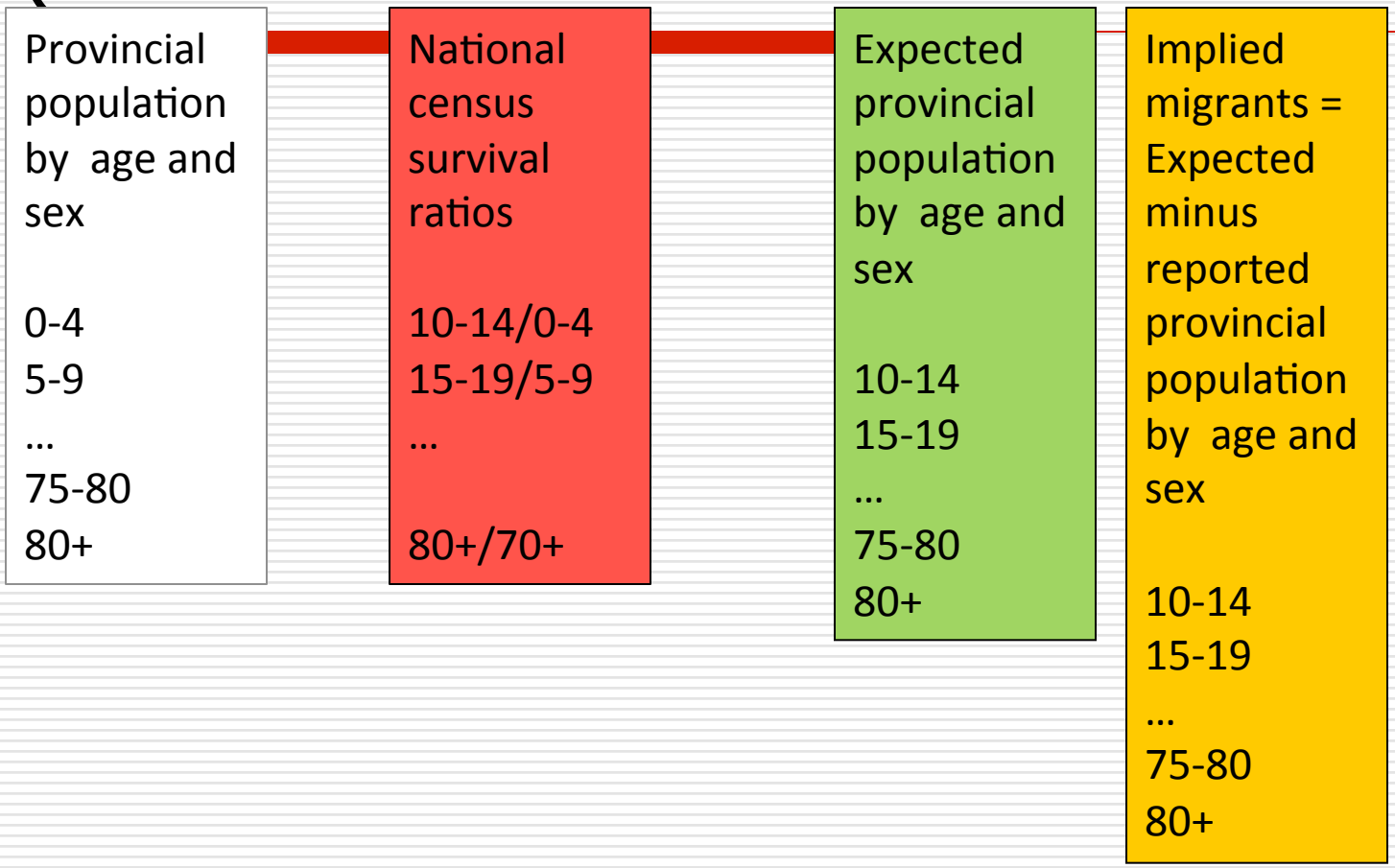


Measuring internal migration (indirect estimation

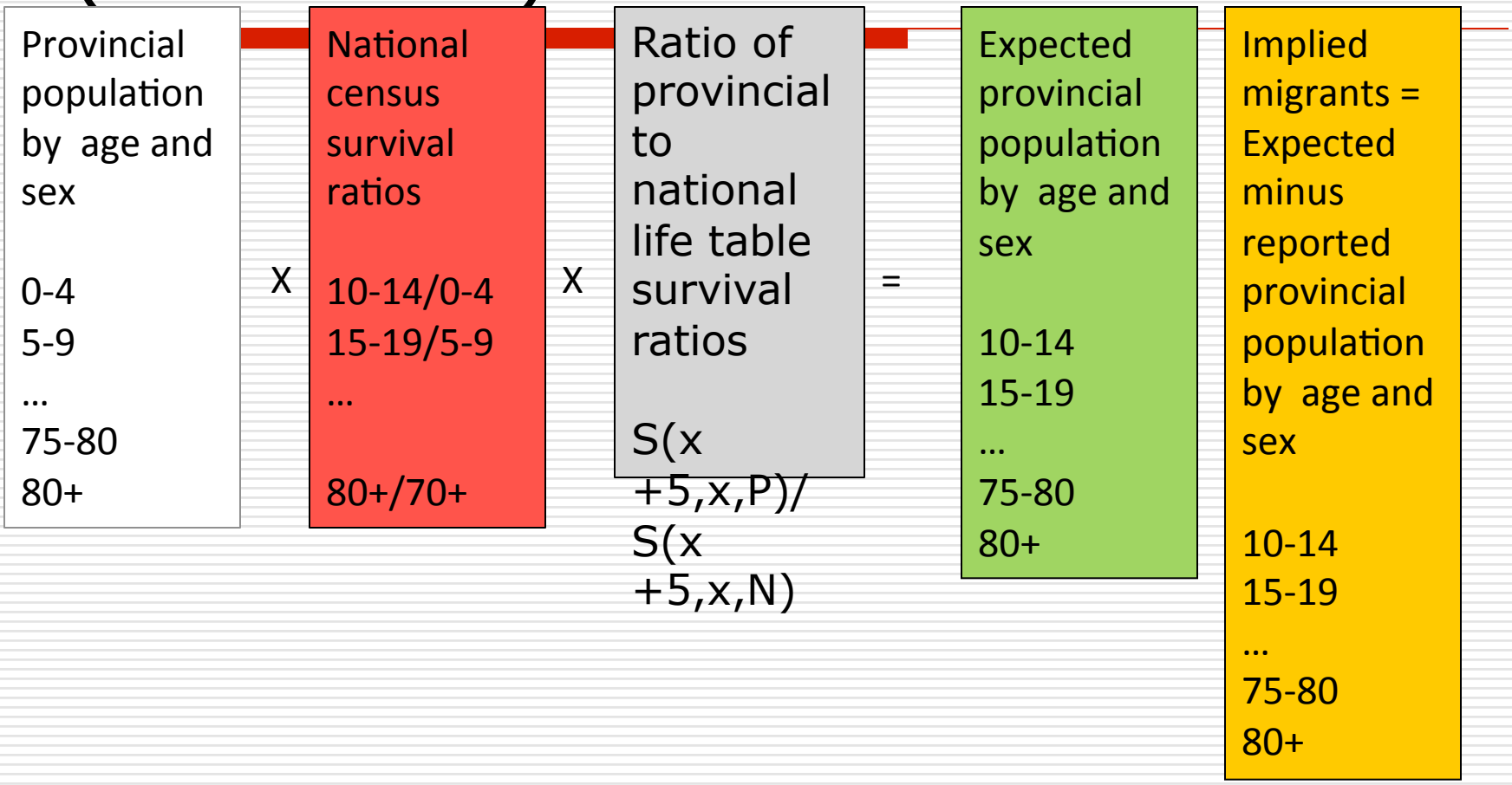
Indirectly measuring internal migration

- Census survival ratio method (CSRMIG.xls) – PASEX Program
- Life table survival ratio method
  - Forward survival
  - Reverse survival
  - Composite
- Composite method

Census Survival Ratio Method (Schematic



Composite Survival Ratio Method (Schematic)



Conclusion