Evaluation of migration and socioeconomic data collected from censuses

United Nations Statistics Division
Overview

1. Internal and international migration
   1. Core topics
   2. Demographic methods
   3. Comparison with other sources

2. Socioeconomic data – comparison with other sources
   a) Household size
   b) Marital status
   c) Literacy and school attendance
   d) Economic activity
Internal migration

- Core topics suggested in UN Principles and Recommendations for 2010 round of censuses:
  - Place of birth – measuring life time migration
  - Two approaches for measuring current movements
    - Duration of residence in current usual residence and place of previous residence
    - Place of residence at a specified date in the past-one year or five years preceding the census

United Nations Workshop on Census Data Evaluation
Hanoi, Viet Nam
2 – 6 December 2013
Internal migration- Basic concepts

- **In-migrants**: person who enters a migration-defining area by crossing its boundary from some point outside the area, but within the same country.

- **Out-migrants**: person who departs from a migration-defining area by crossing its boundary to a point outside it, but within the same country.

- **Net migration**: difference between in and out migrants.
### Table 1. Population 5 Years of Age and Over, by Sex and Place of Usual Residence Five Years Ago - Japan (1990, 2000)

<table>
<thead>
<tr>
<th>Sex</th>
<th>Population 5 years of age and over</th>
<th>Present address</th>
<th>Other place than present address</th>
<th>Outside Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>Same prefecture</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>Same shi, ku, machi or mura</td>
<td>Other shi, ku, machi or mura</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Same prefecture</td>
<td>Other shi, ku, machi or mura</td>
<td>Other prefectures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Outside Japan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population (000s) [2000]</td>
<td>120,793</td>
<td>86,819</td>
<td>33,973</td>
<td>24,961</td>
</tr>
<tr>
<td>Total</td>
<td>120,793</td>
<td>86,819</td>
<td>33,973</td>
<td>24,961</td>
</tr>
<tr>
<td>Male</td>
<td>58,940</td>
<td>41,633</td>
<td>17,307</td>
<td>12,321</td>
</tr>
<tr>
<td>Female</td>
<td>61,853</td>
<td>45,186</td>
<td>16,666</td>
<td>12,640</td>
</tr>
<tr>
<td>[1990]</td>
<td>116,792</td>
<td>87,266</td>
<td>29,507</td>
<td>20,226</td>
</tr>
<tr>
<td>Total</td>
<td>116,792</td>
<td>87,266</td>
<td>29,507</td>
<td>20,226</td>
</tr>
<tr>
<td>Male</td>
<td>57,148</td>
<td>42,031</td>
<td>15,106</td>
<td>9,844</td>
</tr>
<tr>
<td>Female</td>
<td>59,644</td>
<td>45,235</td>
<td>14,401</td>
<td>10,381</td>
</tr>
<tr>
<td>Ratio (%) [2000]</td>
<td>100.0</td>
<td>71.9</td>
<td>28.1</td>
<td>20.7</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>71.9</td>
<td>28.1</td>
<td>20.7</td>
</tr>
<tr>
<td>Male</td>
<td>100.0</td>
<td>70.6</td>
<td>29.4</td>
<td>20.9</td>
</tr>
<tr>
<td>Female</td>
<td>100.0</td>
<td>73.1</td>
<td>26.9</td>
<td>20.4</td>
</tr>
<tr>
<td>[1990]</td>
<td>100.0</td>
<td>74.7</td>
<td>25.2</td>
<td>17.3</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>74.7</td>
<td>25.2</td>
<td>17.3</td>
</tr>
<tr>
<td>Male</td>
<td>100.0</td>
<td>73.5</td>
<td>26.4</td>
<td>17.2</td>
</tr>
<tr>
<td>Female</td>
<td>100.0</td>
<td>75.8</td>
<td>24.1</td>
<td>17.4</td>
</tr>
</tbody>
</table>

1) Includes "Place of usual residence five years ago not reported".
3.2 NET INTERSTATE MIGRATION—1991–2001

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>New South Wales</td>
<td>-71,770</td>
<td>-66,549</td>
</tr>
<tr>
<td>Victoria</td>
<td>-107,832</td>
<td>6,444</td>
</tr>
<tr>
<td>Queensland</td>
<td>201,038</td>
<td>92,188</td>
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<tr>
<td>South Australia</td>
<td>-23,108</td>
<td>-12,894</td>
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<tr>
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<td>11,526</td>
<td>2,886</td>
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<tr>
<td>Tasmania</td>
<td>-9,136</td>
<td>-15,043</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>-1,831</td>
<td>-2,170</td>
</tr>
<tr>
<td>Australian Capital Territory</td>
<td>1,113</td>
<td>-4,642</td>
</tr>
<tr>
<td><strong>Total(a)</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.17 INTERSTATE MOVES MADE BY INDIGENOUS PERSONS—1996–2001 CENSUS

STATE/TERRITORY OF ARRIVAL

<table>
<thead>
<tr>
<th>State/territory of departure</th>
<th>NSW</th>
<th>Vic.</th>
<th>Qld</th>
<th>SA</th>
<th>WA</th>
<th>Tas.</th>
<th>NT</th>
<th>ACT</th>
<th>Total(a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New South Wales</td>
<td></td>
<td>885</td>
<td>3037</td>
<td>297</td>
<td>304</td>
<td>114</td>
<td>200</td>
<td>483</td>
<td>5349</td>
</tr>
<tr>
<td>Victoria</td>
<td>541</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1604</td>
</tr>
<tr>
<td>Queensland</td>
<td>1909</td>
<td>493</td>
<td>521</td>
<td>202</td>
<td>126</td>
<td>103</td>
<td>81</td>
<td>30</td>
<td>3975</td>
</tr>
<tr>
<td>South Australia</td>
<td>209</td>
<td>239</td>
<td>227</td>
<td>214</td>
<td>388</td>
<td>146</td>
<td>647</td>
<td>178</td>
<td>1276</td>
</tr>
<tr>
<td>Western Australia</td>
<td>225</td>
<td>169</td>
<td>342</td>
<td>271</td>
<td></td>
<td>85</td>
<td>506</td>
<td>34</td>
<td>1632</td>
</tr>
<tr>
<td>Tasmania</td>
<td>143</td>
<td>220</td>
<td>266</td>
<td>62</td>
<td>117</td>
<td></td>
<td>44</td>
<td>18</td>
<td>870</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>200</td>
<td>140</td>
<td>859</td>
<td>447</td>
<td>429</td>
<td>7</td>
<td></td>
<td>54</td>
<td>2136</td>
</tr>
<tr>
<td>Australian Capital Territory</td>
<td>404</td>
<td>38</td>
<td>183</td>
<td>25</td>
<td>37</td>
<td>8</td>
<td>49</td>
<td></td>
<td>747</td>
</tr>
<tr>
<td>Total(a)</td>
<td>3648</td>
<td>2188</td>
<td>5435</td>
<td>1518</td>
<td>1675</td>
<td>498</td>
<td>1792</td>
<td>824</td>
<td>17610</td>
</tr>
</tbody>
</table>

Net gain/loss

-1701  584  1460  242  43  -372  -344  77   ..
Internal migration - Demographic methods

- Indirect measures of net internal migration
  - Vital statistics method
  - Survival ratio method
    - Life table survival ratios
Internal migration—Demographic methods

Vital statistics methods

\[ M = P_t - P_0 - (B - D) \]

- **M**: Net migration for a given area (estimation)
- **P<sub>t</sub>**: Population of a given area at year \( t \) - the later census
- **P<sub>0</sub>**: Population of a given area at year 0 - the earlier census
- **B**: the number of births that occurred to residents of the area during the inter-censal period
- **D**: the number of deaths that occurred to residents of the area during the inter-censal period
## Internal migration-Demographic methods

### Vital statistics method – example

<table>
<thead>
<tr>
<th>Region</th>
<th>Population 2001</th>
<th>Population 1991</th>
<th>Rate of net migration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria: Burgenland</td>
<td>277569</td>
<td>270880</td>
<td>0.0159</td>
</tr>
<tr>
<td>Austria: Corinthia</td>
<td>559404</td>
<td>547798</td>
<td>0.0124</td>
</tr>
<tr>
<td>Austria: Lower Austria</td>
<td>1545804</td>
<td>1473813</td>
<td>0.0401</td>
</tr>
<tr>
<td>Austria: Salzburg</td>
<td>515327</td>
<td>482365</td>
<td>0.0596</td>
</tr>
<tr>
<td>Austria: Styria</td>
<td>1183303</td>
<td>1184720</td>
<td>-0.0100</td>
</tr>
<tr>
<td>Austria: Tirol</td>
<td>673504</td>
<td>631410</td>
<td>0.0579</td>
</tr>
<tr>
<td>Austria: Upper Austria</td>
<td>1376797</td>
<td>1333480</td>
<td>0.0237</td>
</tr>
<tr>
<td>Austria: Vienne</td>
<td>1550123</td>
<td>1539848</td>
<td>-0.0021</td>
</tr>
<tr>
<td>Austria: Vorarlberg</td>
<td>351095</td>
<td>331472</td>
<td>0.0504</td>
</tr>
<tr>
<td>Austria: Total</td>
<td>8032926</td>
<td>7795786</td>
<td></td>
</tr>
</tbody>
</table>

Data source: graph produced based on data from United Nations Demographic Yearbook
Internal migration—Demographic methods

Survival-rate method

\[ M_{x}^{x+t} = (P_{x+t}^t - SP_{x}^0) \]

- \( M_{x}^{x+t} \): Net migration for the survivals among persons aged \( x \) at the first census in a given area (they will be aged \( x+t \) at the second census)
- \( P_{x+t}^t \): Population size for cohort \( x \) at year \( t \) (second census)
- \( S \): Survival rate of the cohort \( x \) from year 0 to year \( t \)
- \( P_{x}^0 \): Population size for cohort \( x \) at year 0 (first census)
### Internal migration - Demographic methods

**Survival rate method – Exp. Vienna, Austria**

<table>
<thead>
<tr>
<th>Age</th>
<th>Population in 1991</th>
<th>10-year life table survival ratio</th>
<th>Age</th>
<th>Population in 2001</th>
<th>expected survivors</th>
<th>Net migration</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 4</td>
<td>39,766</td>
<td>0.99623</td>
<td>0 - 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 - 9</td>
<td>36,574</td>
<td>0.99147</td>
<td>5 - 9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-14</td>
<td>34,289</td>
<td>0.98836</td>
<td>10-14</td>
<td>38,867</td>
<td>39,616</td>
<td>-749</td>
</tr>
<tr>
<td>15 - 19</td>
<td>40,166</td>
<td>0.98778</td>
<td>15 - 19</td>
<td>38,979</td>
<td>36,262</td>
<td>2,717</td>
</tr>
<tr>
<td>20 - 24</td>
<td>62,313</td>
<td>0.98576</td>
<td>20 - 24</td>
<td>42,705</td>
<td>33,890</td>
<td>8,815</td>
</tr>
<tr>
<td>25 - 29</td>
<td>72,289</td>
<td>0.98007</td>
<td>25 - 29</td>
<td>54,108</td>
<td>39,675</td>
<td>14,433</td>
</tr>
<tr>
<td>30 - 34</td>
<td>62,655</td>
<td>0.96903</td>
<td>30 - 34</td>
<td>69,222</td>
<td>61,426</td>
<td>7,796</td>
</tr>
<tr>
<td>35 - 39</td>
<td>51,290</td>
<td>0.95187</td>
<td>35 - 39</td>
<td>71,228</td>
<td>70,848</td>
<td>380</td>
</tr>
<tr>
<td>40 - 44</td>
<td>56,236</td>
<td>0.92706</td>
<td>40 - 44</td>
<td>59,845</td>
<td>60,715</td>
<td>-870</td>
</tr>
<tr>
<td>45 - 49</td>
<td>56,240</td>
<td>0.88693</td>
<td>45 - 49</td>
<td>49,023</td>
<td>48,821</td>
<td>202</td>
</tr>
</tbody>
</table>
### Internal migration-Demographic methods

**Survival rate method – Exp. Vienna, Austria**

<table>
<thead>
<tr>
<th>Age</th>
<th>Population in 1991</th>
<th>10-year life table survival ratio</th>
<th>Age</th>
<th>Population in 2001</th>
<th>expected survivors</th>
<th>Net migration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>10-14</td>
<td>5</td>
<td>(6) = (2)*(3)</td>
<td>(7) = (5) - (6)</td>
<td></td>
</tr>
<tr>
<td>0 - 4</td>
<td>39,766</td>
<td>0.99623</td>
<td>10-14</td>
<td>38,867</td>
<td>39,616</td>
<td>-749</td>
</tr>
<tr>
<td>'5 - 9</td>
<td>36,574</td>
<td>0.99147</td>
<td>15 - 19</td>
<td>38,979</td>
<td>36,262</td>
<td>2,717</td>
</tr>
<tr>
<td>'10 - 14</td>
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<td>20 - 24</td>
<td>42,705</td>
<td>33,890</td>
<td>8,815</td>
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<tr>
<td>15 - 19</td>
<td>40,166</td>
<td>0.98778</td>
<td>25 - 29</td>
<td>54,108</td>
<td>39,675</td>
<td>14,433</td>
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<tr>
<td>20 - 24</td>
<td>62,313</td>
<td>0.98576</td>
<td>30 - 34</td>
<td>69,222</td>
<td>61,426</td>
<td>7,796</td>
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<td>25 - 29</td>
<td>72,289</td>
<td>0.98007</td>
<td>35 - 39</td>
<td>71,228</td>
<td>70,848</td>
<td>380</td>
</tr>
<tr>
<td>30 - 34</td>
<td>62,655</td>
<td>0.96903</td>
<td>40 - 44</td>
<td>59,845</td>
<td>60,715</td>
<td>-870</td>
</tr>
<tr>
<td>35 - 39</td>
<td>51,290</td>
<td>0.95187</td>
<td>45 - 49</td>
<td>49,023</td>
<td>48,821</td>
<td>202</td>
</tr>
<tr>
<td>40 - 44</td>
<td>56,236</td>
<td>0.92706</td>
<td>50 - 54</td>
<td>51,774</td>
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<td>-360</td>
</tr>
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<td>41,373</td>
<td>40,445</td>
<td>928</td>
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<td>25,381</td>
<td>24,132</td>
<td>1,249</td>
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<tr>
<td>60 - 64</td>
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<td>24,730</td>
<td>21,639</td>
<td>3,091</td>
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<tr>
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<td>19,593</td>
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<td>4,547</td>
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<td>1,877</td>
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<tr>
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<td>0.33555</td>
<td>85 - 89</td>
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<td>6,057</td>
<td>-571</td>
</tr>
<tr>
<td>80 +</td>
<td>19,832</td>
<td>0.20472</td>
<td>90+</td>
<td>2,336</td>
<td>4,060</td>
<td>-1,724</td>
</tr>
</tbody>
</table>

| All ages | 714,525 | Total 10+ | 653,617 | 612,241 | 41,376 |

**United Nations Workshop on Census Data Evaluation**

**Hanoi, Viet Nam**

**2 – 6 December 2013**
International migration

- Core topics recommended in the P&R
  - Citizenship – stock of foreigners
  - Country of birth – stock of foreign-born population

- Year or period of arrival - current movement
  - Year and month of arrival permit the calculation of the number of completed years between the time of arrival and the census date
  - Provides estimation on the number of immigrants by year of arrival
Possible methods

- Census provides data on immigrants – no accurate data available on emigrants from census
- Indirect method to estimate immigration of foreigners using place of birth data
- Comparison with administrative sources - border registers, residence permits, population registers, migration surveys
Estimating immigration of foreigners using place of birth data

- Data requires to estimate immigration of foreigners:
  - The number of foreign-born females /males, in five year age groups for two censuses
  - For estimating the deaths for foreigners, a suitable life table –model life table

Estimated immigrants

\[ M_{x+t}^x = F_{x+t}^t - SF_x^0 \]
International migration - Comparison with other sources

- **Border registers** - arrivals and departures
  - Border flow data can provide a total picture of the documented movements into, or out of, a country over a specified period of time – one year, five years, etc. – providing data on age-sex, type of visa, nationality

  - Matching census data and border registers for arrivals can be used to evaluate census results – and vice versa

  - For example, Australia matched the 2006 census results for all overseas-born persons who had arrived in Australian between 2001 and 2006 with the Department of Immigration and Citizenship records

*Source: Measuring international migration through population censuses, UN Expert Group Meeting, 2007*
International migration - Comparison with other sources

- **Other possible sources**
  - **Resident permits** - Ideally, the number of valid residence permits at a given time can be equated with the number of foreigners residing legally in a country.
  - **Population registers** - Total resident population including registers of foreigners.
  - **Migration surveys** - Migrants often concentrate in particular areas compared with the entire population so that block sampling or other area based sampling techniques can significantly over or under represent them.

Source: Measuring international migration through population censuses, UN Expert Group Meeting, 2007.
International migration - Comparison with other sources

Challenges

- Harmonization of the definitions and concepts used in each sources of data
- Collaboration with different government agencies - responsible for administrative registration such as immigration officials for border statistics, labor departments for immigrant workers statistics, department of interior for population registers, etc.
- Statistics law for compiling data from other government agencies

United Nations Workshop on Census Data Evaluation
Hanoi, Viet Nam
2 – 6 December 2013
Differences between number of arrivals and departures, Turkey, 2000-2012

Number of persons

-400,000 -300,000 -200,000 -100,000 0 100,000 200,000 300,000 400,000 500,000 600,000 700,000

Years


Number of persons

Foreigners

Citizens

Net emigration for citizens

Net immigration for foreigners

Requires further analysis-matching arrivals/departures - to estimate immigration

-400,000 -300,000 -200,000 -100,000 0 100,000 200,000 300,000 400,000 500,000 600,000 700,000

United Nations Workshop on Census Data Evaluation
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United Nations Statistics Division
EVALUATION OF SOCIOECONOMIC DATA

United Nations Workshop on Census Data Evaluation
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Socioeconomic data from censuses

For consistency check of census data with other sources;

- Standard definitions for socioeconomic data should be used in all sources- otherwise results of evaluation will be significantly affected by differences in definitions

- Different approaches in formulating questions can affect the results of specific source
  - Detailed questions used in LFS for measuring employment status while few questions are used for census purpose
What can be done to check data quality?

- Check the internal consistency of the data
  - Whether plausible when tabulated or cross-tabulated with other characteristics
- Compare with other sources
  - Make sure that definitions used are consistent
  - Graph the derived indicators
  - Cohort analysis of certain indicators
  - Disaggregate by sex and age
- Re-interview surveys, where people were re-interviewed and content of the census responses is verified
Main types of socioeconomic characteristics from censuses

- Household and family characteristics
  - Relationship to household head or other reference member
- Demographic and social characteristics
  - Age
  - Sex
  - Marital status
- Educational characteristics
  - Literacy
  - School attendance
  - Educational attainment
- Economic characteristics
  - Economic activity status (labor force participation)
  - Occupation
  - Industry
  - Status in employment

Core topics from the *Principles and Recommendations for Population and Housing Censuses, Rev. 2*
Household composition

- Most censuses use the household as the unit of enumeration
  - A “household” is typically defined by the common provision of food or other essentials
    - A household may consist of one person who provides for these essentials on his own
    - Not all household members (or even no household members) need be related
  - A “family” consists of individuals who are related by blood, adoption or marriage
    - Must contain at least 2 individuals
  - In many countries, there may be multiple family units residing in one household
Education

- Three core concepts
  - **Literacy** – ability to read and write a short, simple statement
  - **School attendance** – current, regular attendance at an accredited educational institution or program
  - Distinguished from enrollment, which means that the student is officially registered at school, not necessarily that s/he actually goes to class
  - **Educational attainment** – highest grade completed within the most advanced level reached in the educational system (1997 ISCED classification)
Economic activity

- Activity status – a person’s relationship to economic activity during a short reference period (typically a week)
  - **Employed** – a person who worked a defined, minimum amount of time over the reference period (may be as little as an hour)
  - **Unemployed** – a person who did not work the minimum amount of time during the reference period but was willing and able to work and looking for a job
  - **Inactive** (out of labor force) – a person who did not work the minimum amount of time during the reference period and did not want to work/was not looking for work

- Both the employed and the unemployed are economically active
  - Employed + unemployed = labor force
Economic activity

Difficulties:

- What does “work” mean?
  - Goods and services produced for the market
  - Goods produced for own-use (replacing need to buy on market)
  - In practice, this is quite difficult to measure, especially in areas with large agricultural or informal economies
  - Women’s home-based production in particular is often undercounted in censuses

- What does “looking for a job” mean?
  - E.g. some persons may have registered at a government labor office months ago, but done nothing else. Are they looking for a job?
Additional economic characteristics

- **Occupation** – type of work that the person performs (most recent ISCO classification)
- **Industry** – kind of production that the establishment in which the person works engages in (most recent ISIC classification)
- **Status in employment** – type of contract the person has with his place of work (ICSE from the ILO)
  - Recommended categories: Employee; Employer; Own-account worker; Contributing family worker; Members of producer cooperatives; Persons not classifiable by status

Source: *Principles and Recommendations for Population and Housing Censuses, Rev.2*, United Nations, 2008
Evaluation of data
Household size – comparison with other sources

Data source: graph produced based on data from the United Nations Demographic Yearbook and DHS STATcompiler

United Nations Workshop on Census Data Evaluation
Hanoi, Viet Nam
2 – 6 December 2013
Household size – comparison with other sources

Distribution of households by size, Nepal, 1991-2006

Data source:
graph produced based on data from the United Nations
Demographic Yearbook and DHS STATcompiler

United Nations Workshop on Census Data Evaluation
Hanoi, Viet Nam
2 – 6 December 2013
Percent never married – comparison with DHS

Proportion of never married women by age groups, Viet Nam, 1997-2009

Source: United Nations Demographic Yearbook and DHS Uganda country reports
Percent married – comparison with DHS

Source: United Nations Workshop on Census Data Evaluation
Hanoi, Viet Nam
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United Nations Demographic Yearbook and DHS Uganda country reports
Singulate Mean Age at First Marriage (SMAFM)

- Technique for estimating the mean age at first marriage when actual dates of marriage are not available
  - Is a period measure (uses a synthetic cohort)
- Very simple data requirements:
  - Total number of women by 5-year age groups
  - Total number of ever-married women by 5-year age groups
- The method estimates the average number of years lived in the single state by those who marry before age 50
**SMAFM calculation (1)**

**Singulate Mean Age at First Marriage, Viet Nam, 2009**

<table>
<thead>
<tr>
<th>Age group</th>
<th>Total Women</th>
<th>Ever-married women</th>
<th>PEM = (2)(1)</th>
<th>$S_x = 1 - \frac{PEMx}{PEM} \times n * S_x$</th>
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<tbody>
<tr>
<td>15-19</td>
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<td><strong>0.944099</strong></td>
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</tr>
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</table>

PEM is the proportion of ever-married women
PEMUlt is the estimation of proportion of women ultimately married
$S_x$: the estimation of the proportion of women who do ultimately marry who are still single in the age group from $x$ to $x+n$.

Singulate Mean Age at First Marriage, Viet Nam, 2009

<table>
<thead>
<tr>
<th>Age group</th>
<th>Total Women</th>
<th>Ever-married women</th>
<th>PEM = (2)(1)</th>
<th>Sx = 1 - PEMx / PEMult</th>
<th>n * Sx</th>
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</table>

\[ \text{SMAFM} = 15 + \sum n \cdot Sx \]

22.8

United Nations Workshop on Census Data Evaluation
Hanoi, Viet Nam
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Literacy rate by age group, Thailand, 2010

Data source: Graph produced based on data from the United Nations Demographic Yearbook

United Nations Workshop on Census Data Evaluation
Hanoi, Viet Nam
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School attendance

Propotion of children attending school, Thailand, 2000 and 1980 Censuses

Data source:
Graph produced based on data from the United Nations Workshop on Census Data Evaluation, Hanoi, Viet Nam, 2 – 6 December 2013

Consistent with school enrollment?
Share of employed and unemployed population and population not in labor force, 15 years old and over, Turkey, 2000

PHC- conducted in October indicating seasonal effect

LFS - Annual average of four periodic surveys eliminating seasonal effect

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Labor force participation rate by age group and sex, Turkey, 2000


Percent

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Unemployment

Unemployment rate by age group, Turkey, 2000

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Employment Status

Employment Status, Turkey, 2000

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