Track A: Transfers

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Public Transfers

• Public transfer system consists of a set of mutually exclusive and exhaustive programs
• Programs vary across countries and can be broadly defined by sector (education, etc.) or narrowly defined (Aid for Teenage Mothers, etc.)
• Source of funding: Some programs have obligated or committed sources (e.g., 90% of Taiwan’s Health Tax on Tobacco goes into NHI Fund), thus have distinctive age pattern in inflow and outflow
• Age-related programs are the emphasis in NTA
Age Profile of Public Transfer Flows (Japan, 2004)

Public Transfers

Education
Public Transfers

• A public transfer program is measured in NTA by:
  – Outflows from taxpayers or social contributors funding the program
  – Inflows to the beneficiaries of the program
  – Total inflows and outflows must be equal, for each sector, though not for any age
Public Inflows (by major sectors)

• In-kind transfer: From Public Consumption
  – Education
  – Cash transfers to HH for health care are counted as public consumption of health care
  – Other in-kind transfers

• Cash transfers
  – Social security benefits in cash
  – Social assistance benefits in cash
  – Pension programs
  – Grants,...
Public Outflows (by major sources)

• Taxes
  – Direct taxes
  – Indirect taxes, minus subsidies
  – Other revenues, e.g., fees and fines

• Social security contributions

• Transfer surplus // deficit
  – If public outflows > public inflows, i.e., the government spends more than it collects in taxes, then it has a deficit
  – This is a calculated amount, no SNA or GFS counterpart

• Grants

• Talk more in section III
Public Transfers: Inflows = Outflows

government consumption

social assistances

social insurances

“transfer surplus/deficit”

taxpayers

targeted groups (students, elderly, unemployed, …)

general public

GOV

taxes (net of subsidies)

Social contribution

national transfer accounts
How Is Public Transfer Deficit Financed?  
(Taiwan, 1998)

- ROW, net: 1,806
- Public asset income: 248,432
- Public savings: 84,684
- Social insur. fund surplus: 49,324

Receipts:
\[ 1,806 + 248,432 = 250,238 \]

Disbursements:
\[ 84,684 + 49,324 + 116,231 = 250,238 \]

Transfer deficit (i.e., inflow > outflow):
\[ 116,231 \]
Public Sector Accounts Balance

• Inflows
  – Public asset income
  – ROW, net

• Outflows
  – Public transfer deficit (a calculated term)
  – Public savings
  – Other forms of asset accumulation, such as the surplus of NHI fund
Three Important Questions

• How large is each program (annual expenditure)?
• Which age groups benefit (inflows)?
• Which age groups bear the cost (outflows)?
How to: Public Transfer Inflows

1. Identify all public expenditures

2. For in-kind transfer programs, you have already calculated the inflow as part of public consumption

3. For cash transfer programs, find an age shape indicator and adjust to the macro control:
   - Macro controls by program may come from public expenditure reports
   - If totals do not agree with SNA, adjust proportionally
How to: Public Transfer Outflows

1. Identify all taxes and social contributions

2. Find an age shape indicator for each and adjust to the macro control:
   - If no information on tax payments by age, use age shape of source being taxed (example: consumption taxes)
   - Macro controls by type of tax may come from public revenue reports
   - If totals do not agree with SNA, adjust proportionally

3. Transform taxes into public transfer outflows based on source of revenue for each program
   - Some benefits are paid for with “earmarked” taxes (completely or in-part)
   - Other benefits financed by general revenues
Table 13. Tax Incidence for Public Transfer Outflows

<table>
<thead>
<tr>
<th>Public Transfer Outflows</th>
<th>Tax Incidence or Source of Outflow</th>
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<tr>
<td>Taxes on Income</td>
<td>Combined asset and labor income</td>
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<td>Taxes on Profits and capital gains</td>
<td>Asset income</td>
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<td>Taxes on earnings including contributions of employers; Social contributions</td>
<td>Earnings or labor income</td>
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<td>Taxes on Payroll and workforce</td>
<td>Earnings</td>
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<tr>
<td>Taxes on Property</td>
<td>Value of assets</td>
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<tr>
<td>Taxes on Goods and Services</td>
<td>Value of consumption of goods and services subject to tax</td>
</tr>
<tr>
<td>Taxes on International Trade and Services</td>
<td>Various: Consumption, labor income, asset income, Rest of the World.</td>
</tr>
<tr>
<td>Other Taxes</td>
<td>Various</td>
</tr>
</tbody>
</table>
Private Transfers

• Interhousehold transfers:
  – Gifts from family/friends/charity, alimony, child support, remittances
  – Given and received by household heads only

• Intrahousehold transfers:
  – Not part of national accounts
  – NTA innovation
  – Model based (assumptions + other NTA age profiles):
    • Other NTA age profiles give how much each person consumes and how much cash he has to pay for that consumption
    • Some in household have cash surplus, some have deficit
    • Assumed equal sharing model by which those with cash surplus make transfers to cover the needs of those with deficits
How to: Inter-Household Transfers

1. Identify transfer flow given and received from household survey:
   - May need to supplement with outside information if there are significant remittance inflows or outflows

2. Find the macro controls:
   - Some countries have enough SNA detail to calculate inflow and outflow macro controls
   - Others just have a net flow macro control

3. Adjust to macro controls:
   - Straightforward if you have inflows and outflows
   - See manual for details on how to adjust to net flow amount
How to: Intra-Household Transfers

1. Start with macro-adjusted, unsmoothed, individual-level amounts for:
   - Private consumption by sectors (education, health, owned housing, other)
   - Labor income
   - Public cash transfer inflows
   - Net inter-household transfers
   - Taxes paid
   - Implement household sharing model (stata code will be available online)
     - See manual for adjustments if the “ingredients” for intrahousehold transfers come from different sources

2. No macro adjustments necessary, but small adjustments to maintain inflow/outflow balance
Lab Exercise

- Lost my public transfer exercise! (I will send you the example code via email and/or post to the NTA wiki page for the workshop)
- Intra-household transfer spreadsheet