NATIONAL TRANSFER ACCOUNTS

Barcelona 2013

Ninth Meeting of the Working Group
on Macroeconomic Aspects
of Intergenerational Transfers.
3rd · 8th June 2013

Reallocations
Track A Training
June 7, 2013

Gretchen Donehower

University of California at Berkeley, Demography

United States

Public Reallocations

- Economic flows to and from age groups that arise because of government action.
  - But… NTA attributes all flows to individuals; the government is only an intermediary
- Two kinds:
  - Public transfers
    - inflows=benefits
    - outflows=taxes and non-tax methods of funding public transfers)
  - Public asset-based reallocations (flows arising from publicly held assets and debts)

Public Transfers

- Public transfers are classified by use or purpose and in-kind vs. cash:
  - Education, In-kind
  - Health, In-kind
  - Other, In-kind
  - Pensions (cash)
  - Other cash

Public Asset-based Reallocations

- Public asset income
  - Inflows
    - income from publicly owned enterprises
    - income from sovereign wealth funds
  - Outflows
    - Interest on public debt
- Public saving
  - Inflows
    - Dis-saving financed by selling new bonds
  - Outflows
    - Saving in sovereign wealth funds or other investments

Public Reallocations Macro Example

Sample Structure of Public Flow Account			
	Total	National	ROW
Public Transfers			
Net Public Transfers	0.0	1.8	-1.8
Public Transfer Inflows	2,002.7	2,001.0	1.7
In-kind Transfer Inflows	1,665.9	1,665.9	--
Cash Transfer Inflows	336.8	335.1	1.7
Public Transfer Outflows	2,002.7	1,999.2	3.5
Taxes and Grants	1,888.2	1,884.8	3.5
Transfers Surplus(+)/Deficit(-)	114.4	114.4	--
Public Asset-based Flows			
Public Asset-based Reallocations	114.4		
Asset Income, net	248.4		
Less: Public Saving	134.0		

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

How to: public asset-based reallocations

1. General tax revenue age shape is used for all public asset-based reallocation age profiles

    – NTA assumption that taxpayers own government assets and are responsible for all government debts

2. Adjust to macro controls for public asset-based flows from SNA

The Role of Taxes in Public Reallocations

- As part of building public reallocation profiles, we create age profiles of all types of taxes and social contributions
  - BUT these tax profiles do not become part of the flow account themselves
  - We use their age shapes as the age shapes for transfer outflows and asset-based reallocations

Private Reallocations

- Economic flows to and from age groups that arise because of individuals, corporations and non-profit institutions serving households (NPISH).
  - But… NTA attributes all flows to individuals; corporations and NPISH are only an intermediaries
- Two kinds:
  - Private transfers
    - Interhousehold transfers (between households)
    - Intrahousehold (within households)
  - Private asset-based reallocations
    - Private asset income
    - Private saving

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

Private Asset-based Reallocations

- Private asset income
  - Private capital income
    - Return to corporate and household capital
    - Also called operating surplus
    - Accrues to owners of corporations (shareholders) and households (home owners)
  - Private property income
    - Distributed to the owners of assets
    - Dividends, interest, rents
    - Inflows and outflows must balance, but there may be net ROW flow
- Private saving
  - Final balancing item
  - Private saving = labor income + asset income (public and private) + net transfers (public and private) – consumption – public saving

Variables	All Ages	Age Group						ROW
		0-14	15-29	30-44	45-64	65-89	90+	
Per Capita Values (US$ 000's)								
Private Reallocations	5.4	12.1	5.9	(7.1)	3.5	19.3	22.3	na
Transfers	(0.2)	12.3	6.6	(8.9)	(7.5)	(2.7)	(4.9)	na
Interhousehold Transfers	(0.2)	-	0.3	0.0	(0.6)	(0.9)	(1.1)	na
Inflows	0.3	-	0.4	0.5	0.3	0.1	-	na
Less: Outflows	0.5	-	0.1	0.5	0.9	1.0	1.1	na
Intrahousehold Transfers	-	12.3	6.3	(8.9)	(6.9)	(1.9)	(3.8)	na
Inflows	11.2	12.3	11.2	10.9	12.9	6.5	0.7	na
Less: Outflows	11.2	-	5.0	19.8	19.8	8.4	4.5	na
Asset-Based Reallocations	5.6	(0.2)	(0.7)	1.8	11.0	22.0	27.2	na
Asset Income	7.7	-	1.0	5.0	14.6	24.0	15.8	na
Capital Income	6.8	-	1.3	7.0	12.9	15.6	10.0	na
Property Income	0.9	-	(0.3)	(2.0)	1.7	8.4	5.8	na
Less: Saving	2.1	0.2	1.7	3.2	3.6	2.0	(11.4)	na
Aggregate Values (US$ billions)								
Private Reallocations	1,568	734	353	(460)	242	662	38	na
Transfers	(51)	746	395	(578)	(512)	(94)	(8)	51
Interhousehold Transfers	(51)	-	18	2	(39)	(30)	(2)	51
Inflows	81	-	23	32	22	4	-	unk
Less: Outflows	132	-	6	31	61	33	2	unk
Intrahousehold Transfers	-	746	377	(580)	(473)	(64)	(6)	0
Inflows	3,237	746	675	708	884	223	1	0
Less: Outflows	3,237	-	298	1,287	1,357	287	8	0
Asset-Based Reallocations	1,619	(12)	(42)	118	754	755	46	na
Asset Income	2,235	-	61	325	999	823	27	na
Capital Income	1,971	-	77	455	886	535	17	na
Property Income	265	-	(16)	(130)	114	288	10	(265)
Less: Saving	616	12	103	207	245	68	(19)	na

Private Reallocations Example (US, 2003)

How to: interhousehold 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: intrahousehold transfers

1. Here is where you need the micro-level database!
   - 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

How to: private asset income

1. Identify age shapes of different types of asset-based flows, all attributed to household head
   - General property income
     - Dividends, interest received, rent (land/resource rent, not apartment rent)
   - Mixed income (same as self-employment but attributed to head)
   - Imputed rent (same as owner-occupied housing, but all attributed to head)
   - Interest expense of households
     - Some countries may be able to identify differeny types:
       » Interest paid by households to government
       » Other interest expense

2. Adjust appropriate age shapes to different macro controls

How to: private asset income (cont.)

Macro Control	Age Shape
CAPITAL INCOME COMPONENTS:	
1. NOS of Corporations and NPISH	Property Income (Div., Int., Rent)
2. NOS of HH	Imputed Rent
3. Mixed Income, Capital Share (MICS)	Mixed Income
4. Indirect Taxes Less Subsidies, Capital Share	[1+2+3, after adjustment]
PROPERTY INCOME COMPONENTS:	
5. Property Income Inflow	Property Income (D,I,R)
6. Interest Outflow, HH to Gov't	Interest Expense, HH to Gov't
7. Interest Outlfow, HH to Consumer Creditors	Int Expense, HH
8. Property Income Outflow, excluding HH interest	Property Income (D,I,R)

How to: private saving

- Labor income
  - PLUS net transfers (public and private)
  - PLUS asset income (public and private)
  - LESS public saving
  - LESS consumption (public and private)
- No macro adjustment necessary because it is made from macro adjusted NTA age profiles
- Aggregate should equal SNA net national saving by private sector (households, corporations, NPISH)

Finalizing age profiles

- Evaluating
  - Is smoother okay?
  - Do the population aggregates match macro controls?
  - Do flows that are supposed to balance actually balance?
  - Is it reasonable?
    - Checking results for children, external validity checks, relative to other researchers' results in the literature
- Documenting and archiving
  - For your country team
  - For the project (on the wiki)