Manual on National Transfer Accounts: Overview (Chapter 2)

Gretchen Donehower
University of California at Berkeley

Workshop on NTA Manual, Bangkok, Thailand September 17-20, 2012



2.1 Introduction

2.2 Conceptual elements

2.3 The accounts

2.4 Examples



2.1 Introduction

2.2 Conceptual elements

2.3 The accounts

2.4 Examples



2.1 Introduction

- What are NTAs?
 - Accounting for economic flows by age
 - Aggregate values are broadly consistent with concepts developed in national accounts, codified in the System of National Accounts (SNA)
- (Introduction to manual "test drive")



2.1 Introduction

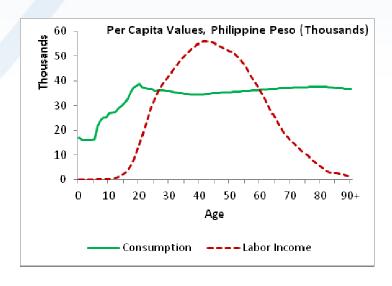
2.2 Conceptual elements

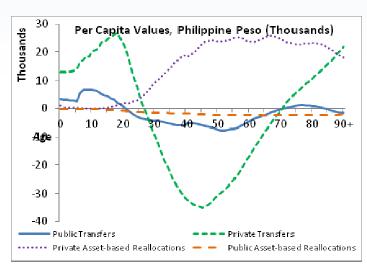
2.3 The accounts

2.4 Examples



- Economic lifecycle and reallocation systems
 - Consumption and labor income by age present the "problem" to be solved by all economies.
 - The "problem" is solved by reallocation
 - transfers between age groups
 - using assets to transfer resources through time







- Economic lifecycle and reallocation systems (cont)
 - Reallocation is facilitated by institutions and mechanisms
 - Transfer systems
 - Private (families, non-profits)
 - Public (government mandated programs)
 - Assets that can act as a store of value over time
- Age and the individual perspective
 - NTA classifies economic flows by age of the individual
 - Individuals receive inflows and give outflows, with saving as the balancing item
 - Challenges to the individual perspective
 - Institutions are just agents, so NTA must make assumptions to attribute all flows through institutions to individuals
 - Measurement



- Institutions provide a framework for organizing individual flows
 - Private sector (corporations, households, NPISH)
 - Public sector (all government levels, consolidated)
 - Rest of world
- Households
 - Common unit of analysis, but households are not a useful concept for analyzing the generational economy
 - BUT, in order to look inside households we need a model/assumptions
 - Usually assume equal sharing within households, except...
 - Household head owns all assets/debts and makes all interhousehold transfers



- NTA and SNA (System of National Accounts)
 - Consistencies
 - Main aggregates
 - NTA uses amounts from SNA as aggregate controls
 - Differences
 - Institutional versus individual perspective
 - Some NTA flows do not have SNA counterparts
 - Could be combination of SNA amounts (e.g. NTA labor income combines parts of SNA compensation of employees and mixed income)
 - Could be a wholly NTA concept and have no SNA counterpart (e.g. intra-household transfers)

2.1 Introduction

2.2 Conceptual elements

2.3 The accounts

2.4 Examples



NTA flow identity, in two arrangements, by age x

$$\underbrace{Y^{l}(x) + \tau^{+}(x) + Y^{k}(x) + Y^{p+}(x)}_{\text{Inflows}} = \underbrace{C(x) + \tau^{-}(x) + Y^{P-}(x) + S(x)}_{\text{Outflows}}$$

$$C(x) - Y^{l}(x) = \tau^{+}(x) - \tau^{-}(x) + Y^{A}(x) - S(x)$$
Lifecycle Deficit

Net Transfers

Asset-based Reallocations

Age Reallocations

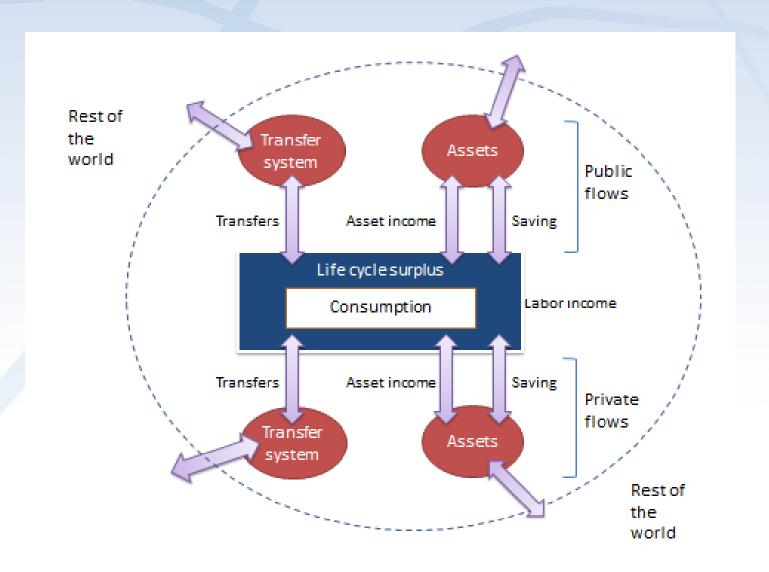


- NTA, aggregate values, aggregate constraints
 - Levels of aggregation at which NTA flows are the same as SNA flows
 - Some flows must be balanced
 - Transfers and property income
 - May not balance within sector
 - May have a net Rest of World flow
- Economic lifecycle and age reallocation accounts (as in rearranged flow equation)
 - Lifecycle account (consumption labor income)
 - Public reallocations (public transfers and asset-based reallocations)
 - Private reallocations (private transfers and assetbased reallocations)



- Economic mechanisms for age reallocations
 - Transfers (no enforceable contract, market transaction, or quid pro quo)
 - Asset-based flows
 - Only involve flows during current accounting period
 - saving/dissaving
 - asset income (capital income + property income)
 - Changes in asset prices are in the capital accounts (pending)







- Distinguishing flows by purpose relevant to study of the generational economy
 - Education
 - Health
 - Public pensions
 - Other
- A stylized NTA flow account
 - Only three age groups
 - Example highlights important features of accounts



Table 2.1 NTA Flow Account, Stylized, value of aggregate annual flows.

Table 2.1 NTA How Account, Styllzed,	varac or a	BBI CBate ai	illiaal liev	J.		
					Rest of	
		Working-		Total	the	
	Children	age	Elderly	economy	world	Total
Panel A. Economic lifecyle						
Lifecycle deficit	20	-15	10	15		
Consumption	20	70	10	100	2	102
Labor income	0	85	0	85	1	86
Age reallocations	20	-15	10	15	0	0
Panel B. Public age reallocations						
Public age reallocations	5	-8	5	2		
Public transfers	5	-11	5	-1	1	0
Public transfer inflows	5	0	5	10	2	12
LESS: Public transfer outflows	0	11	0	11	1	12
Public asset-based reallocations	0	3	0	3	0	3
Public asset income	0	-4	0	-4	0	-4
LESS: Public saving	0	-7	0	-7	0	-7
Panel C. Private age reallocations						
Private age reallocations	15	-7	5	13		
Private transfers	15	-22	2	-5	5	0
Private transfer inflows	15	10	3	28	6	34
LESS: Private transfer outflows	0	32	1	33	1	34
Private asset-based reallocations	0	15	3	18	-1	17
Private asset income	0	21	1	22	2	24
LESS: Private saving	0	6	-2	4	3	7



Algebraic representation of NTA



2.1 Introduction

2.2 Conceptual elements

2.3 The accounts

2.4 Examples



2.4 Examples

- NTA with broad age groups (US 2003, tables)
- Graphical representation (Philippines, 1999)

(Are these helpful? Need more discussion?)



2.1 Introduction

2.2 Conceptual elements

2.3 The accounts

2.4 Examples



- Projections
- Bequests and other capital transfers
- Wealth accounts
- Gender, time use and household production
- Inequality and poverty
- Sub-national accounts
- Environmental accounts

