# Introducing age into household satellite accounts

NTA Working Group on Time Use and Gender
Workshop on Unpaid Labor Satellite Accounts
June 13-14, 2011
UC Berkeley Demography Department

*Róbert I. Gál (gal@tarki.hu)*

*Márton Medgyesi*

*Endre Szabó*

TÁRKI

## Structure of presentation:

* Beyond national income (NNI)

* An NTA exercise on unpaid household labour (HH_YL)
    - age profile of HH_YL
    - consumption of HH_YL
    - life-cycle deficit on HH_YL

* Age-profiles in a modern and a traditional society: some hypotheses

* Job to be done: aggregation of HH and NNI profiles and full system of LCD financing

TÁRKI

## Motivation: Beyond national income (NNI)

Instead of handling poverty risks the welfare state helps financing the inactive periods of the life-cycle through interage reallocation.

Historically, the emergence of the welfare state is an intervention to an interage reallocation system that has been there before for centuries. It takes over some of the interage reallocations but far from all.

NTA , based on the national income, covers full reallocation beyond the household and some but not all within (no intrahh and interhh time transfers and no familial interhh transfers).

We believe that interage reallocation within and beyond the household are different. Reallocations towards children are more difficult to drag out of the family. We believe that this explains some of the flaws of the welfare state. We believe that this is policy relevant.

TÁRKI
TARSADALOMKUTATASI INTÉZET RT

# Methodology problems to overcome

1.  What is work and what is not?
    - the 3rd person principle

2.  How to value labour?
    - replacement cost (by wage of activity or wage of occupation)

    (the problem of selection bias)

    - opportunity cost

3.  Gross or net?
    Difference: taxes and the cost of work

**TÁRKI**

# Methodology problems to overcome, contd.

4.  How to estimate the system of transfers of time?

    - Time use survey gives information on time outflows but inflows are more difficult to capture
    - Some activities are time transfers directed to a specific person; other activities are time transfers to the entire household

5.  Overlaps
    - more people doing the same activity
    - one person doing more activities at the same time

6.  Interhousehold time transfers

**TÁRKI**
TARSADALOMKUTATASI INTEZET RT

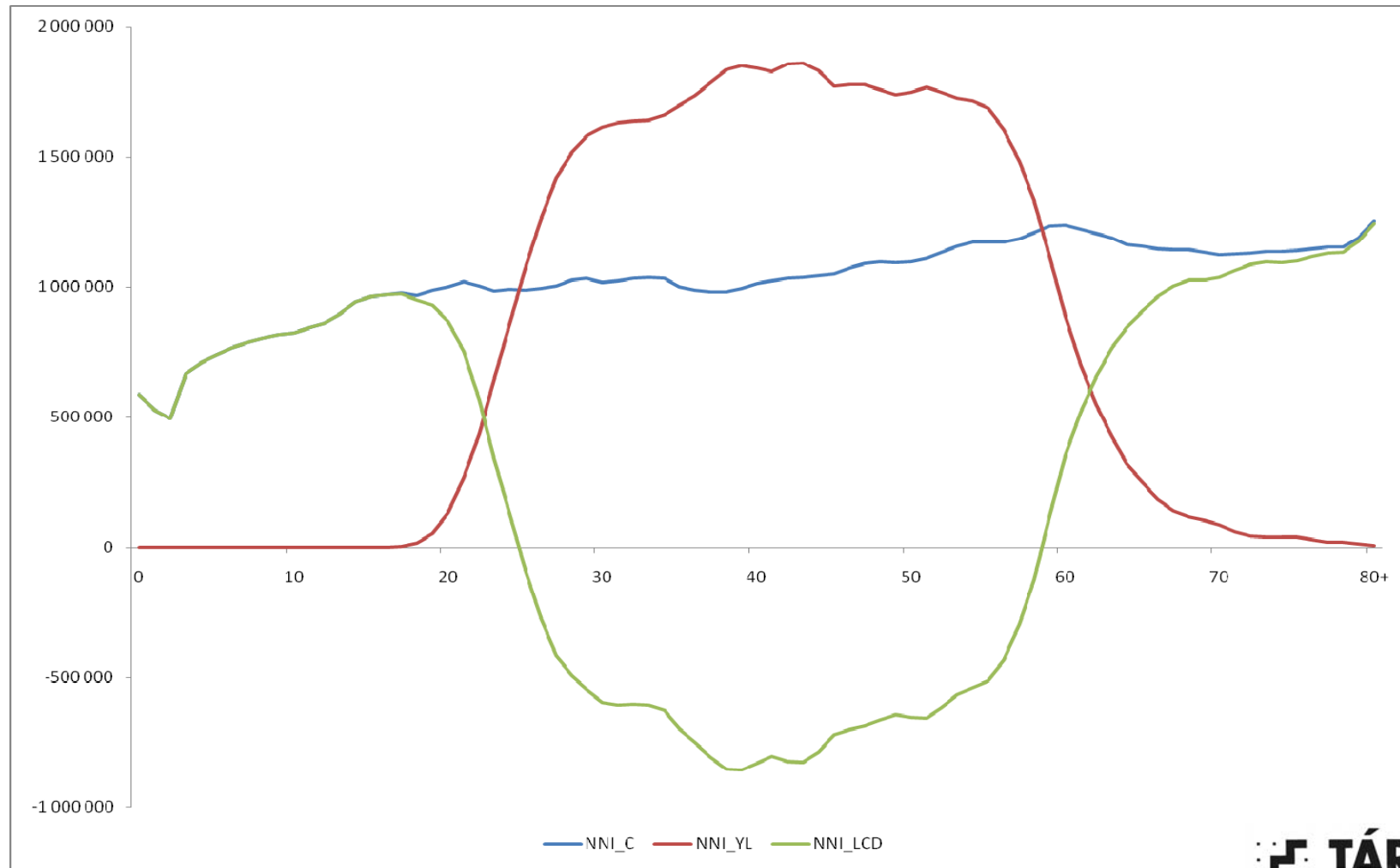## Creating YL and C age-profiles of unpaid household labour

Age-profiles of the value of unpaid household labour (HH_YL) were deduced from the 2000 H. Time Use Survey and (gross) market wages.

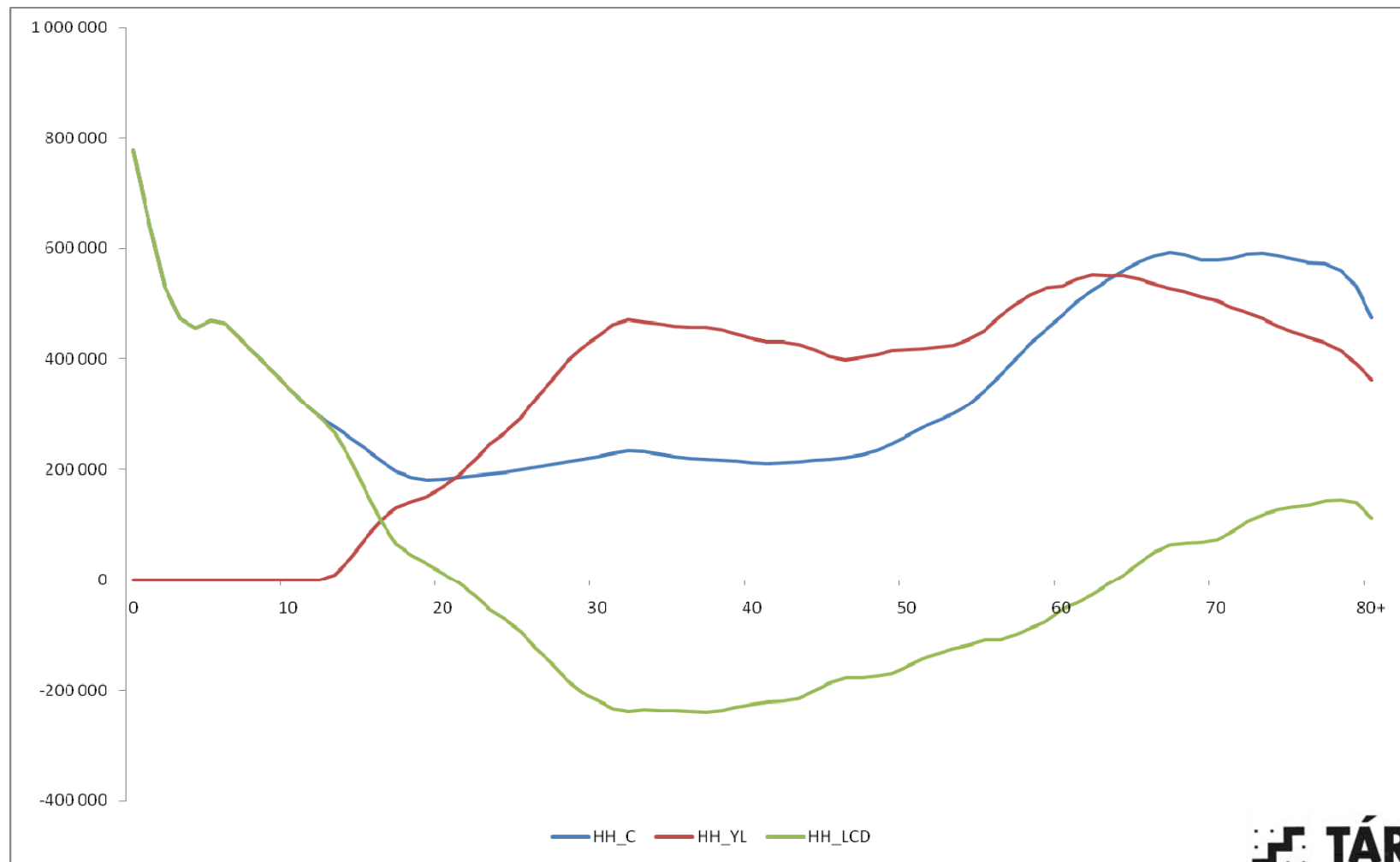Services provided by HH labour were assigned to consumers in two steps. Equivalence scale applied: per capita.

Some notes:

- Time spent on HH labour exceeds the time spent on paid labour. Labour market activities are more efficient making the total value of market labour higher than that of HH labour. Still, the latter is significant.
- Value of HH labour is overestimated due to selection bias, which increases by age.
- Consumption means consumption of services provided by unpaid HH labour rather than HH consumption in general. Consequently, the aggregate HH_LCD is always zero.

**TÁRKI**
TARSADALOMKUTATASI INTEZET RT
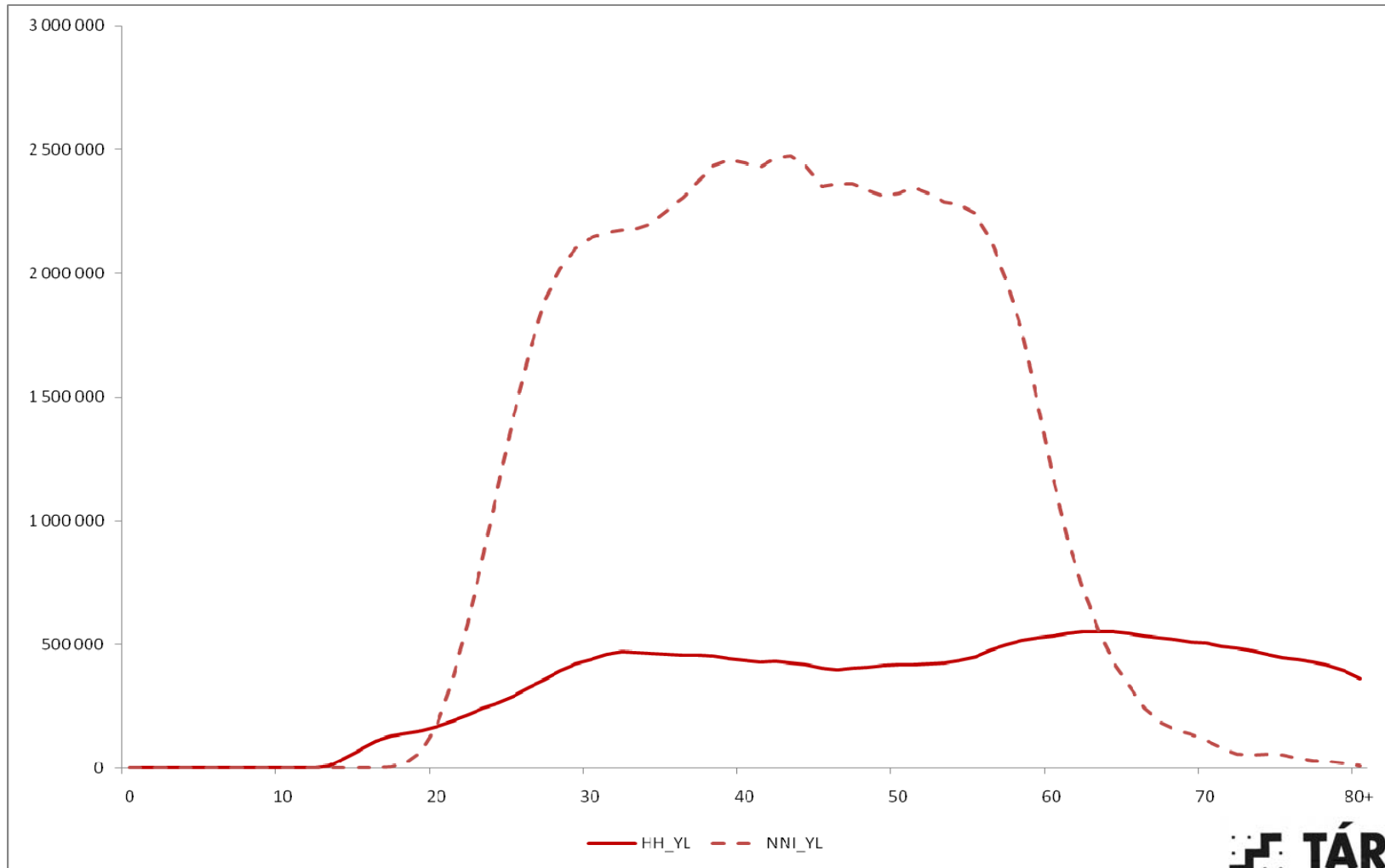
# C, YL and LCD in the Hungarian NNI_NTA, 2005

# C, YL and LCD in the Hungarian HH_NTA, 2000
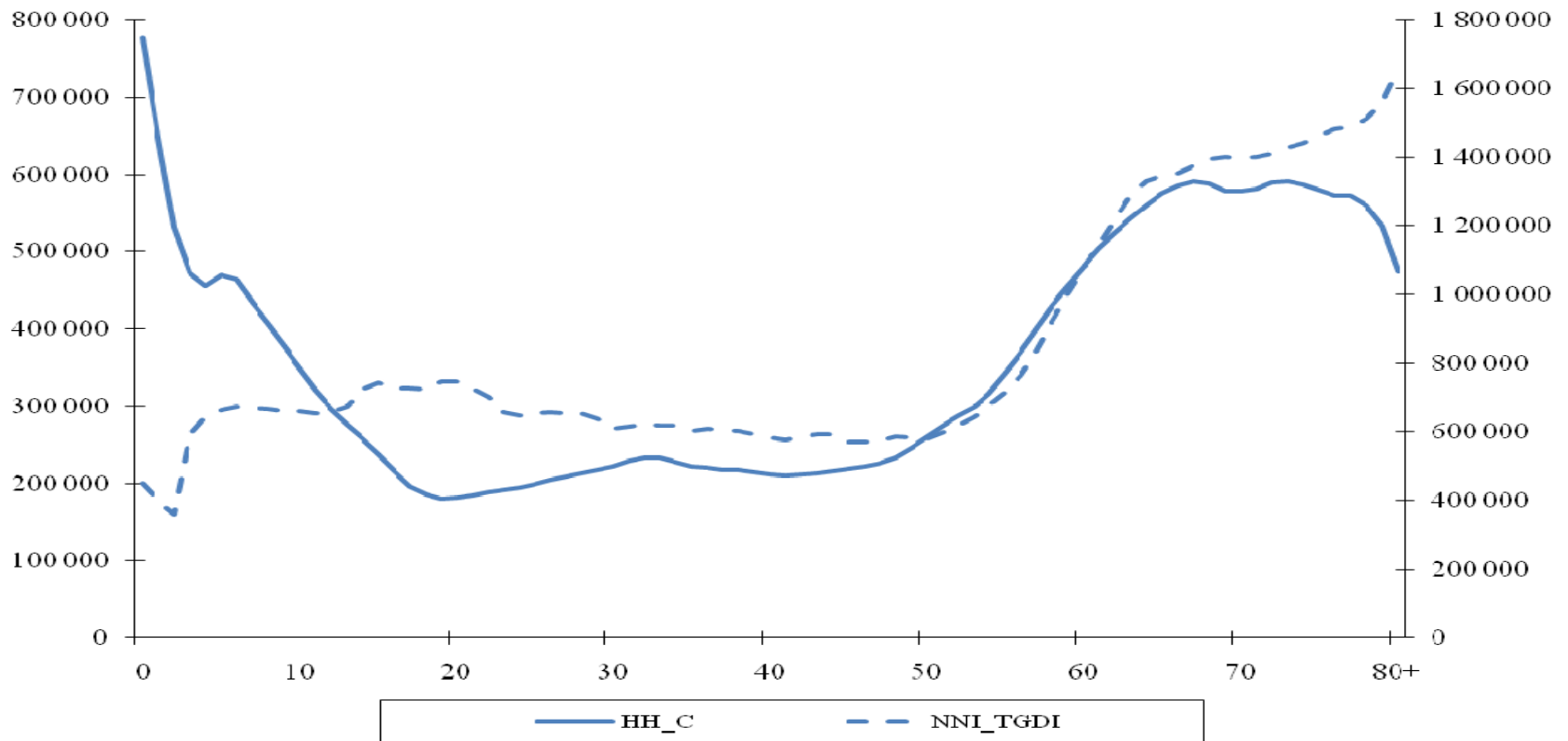
1.  People work longer: they practically work as long as they live (although the value of labour is somewhat overestimated and bias is stronger in old age).
2.  Shifts over the life-cycle from one section to the other are not so explicit.
3.  The value of HH labour increases by retirement.
4.  Consumers of time transfers have an age-profile comparable to that of the welfare state with some bias toward small kids.
5.  Significant asymmetry between the youth LCD and the elderly LCD comparable to the reallocation of intrahh transfers in the NNI_NTA. Retired households consume the services they provide for themselves.
6. Overlap between NNI_NTA and HH_NTA. NNI_NTA has to be revised.
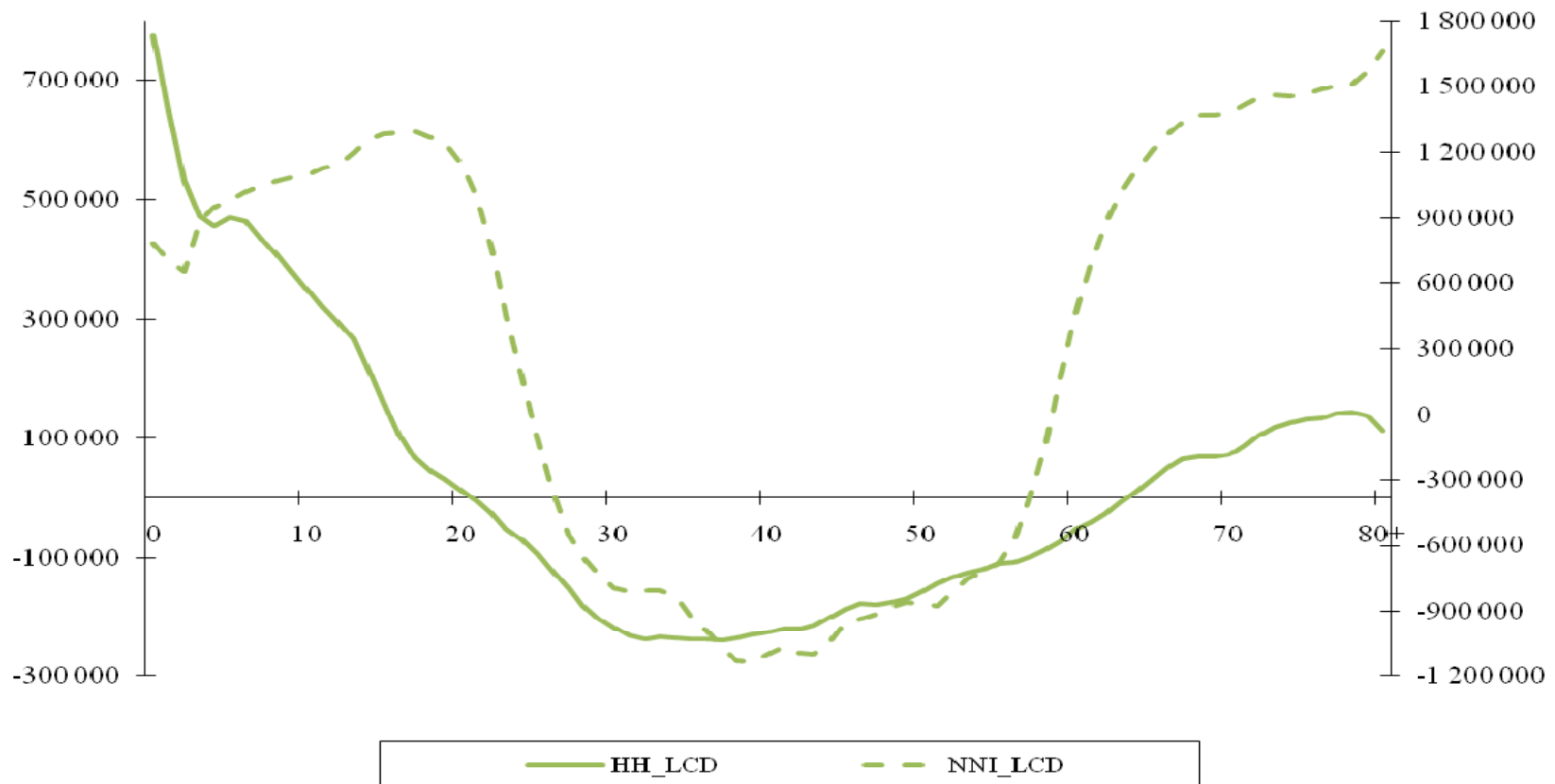
# HH_YL (2000) and NNI_YL (2005)

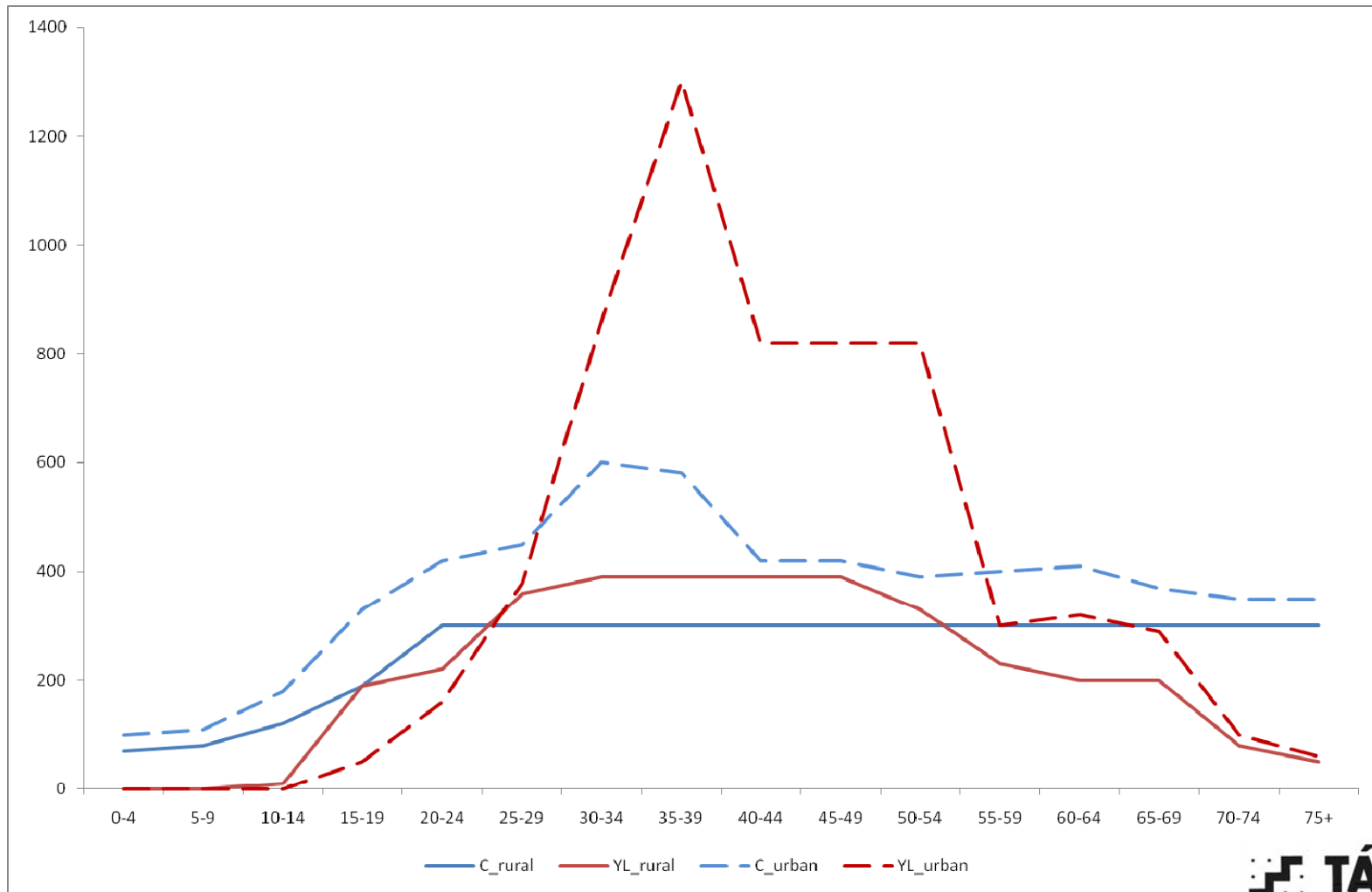# C in HH_NTA (2000) and TGDI in NNI_NTA (2005)



HH: left-hand scale, NNI: right-hand scale

# HH_LCD (2000) and NNI_LCD (2005)



HH: left-hand scale, NNI: right-hand scale

# Age-profiles of C and YL in a traditional society (Cote d'Ivoire)



Source: Stecklov (1997)

# A story

The household is the traditional institution of interage reallocations.

The welfare state takes over most of these reallocations and distorts them.

Significant characteristics of the traditional household survive in modern households but the latter reveal clear signs of adjustment to changes induced by state intervention.

# Job to be done

Aggregation of HH and NNI profiles
- gross vs net
- 2000 vs 2005

A full system of LCD financing

TÁRKI