

National Transfer Accounts: Two Applications

Róbert I. Gál (DRI, TARKI, CUB)(gal@demografia.hu)

**Sustainability of the Austrian and the Hungarian Welfare
States: An Application of National Transfer Accounts**

Presentation at the European Centre, Vienna, 15 November 2012

Structure of the presentation:

A new chapter in national accounting

State intervention in LCD financing: a retrospective macro-simulation;
disintegration of the chain of intergenerational resource flow

Extending LCD measurement to unpaid household labor: children cost to parents,
the elderly cost to the taxpayers

Conclusion: two design failures by the interventionist state
neglecting the link between resource flows of opposite directions
neglecting alternative providers

A new chapter in national accounting

Turn of 19th-20th century: first national income aggregates

1930th: first experimental national accounts (Clark, Kuznets);

Late 1940s – early 1950s: first systems of national accounts describing the items of national income flowing among institutions (such as households, government and the corporate sector); the integrated account

1990s: first household satellite accounts extending national accounts with unpaid household labor

Turn of 20th-21st century: first national transfer accounts (NTAs) describing the items of national income flowing among people in different age (such as children, the active aged, the elderly). National accounting turns to new surveys, such as income and consumption and time use surveys and imports age-profiles.

Early 2010s: first national time transfer accounts introducing age to household satellite accounts

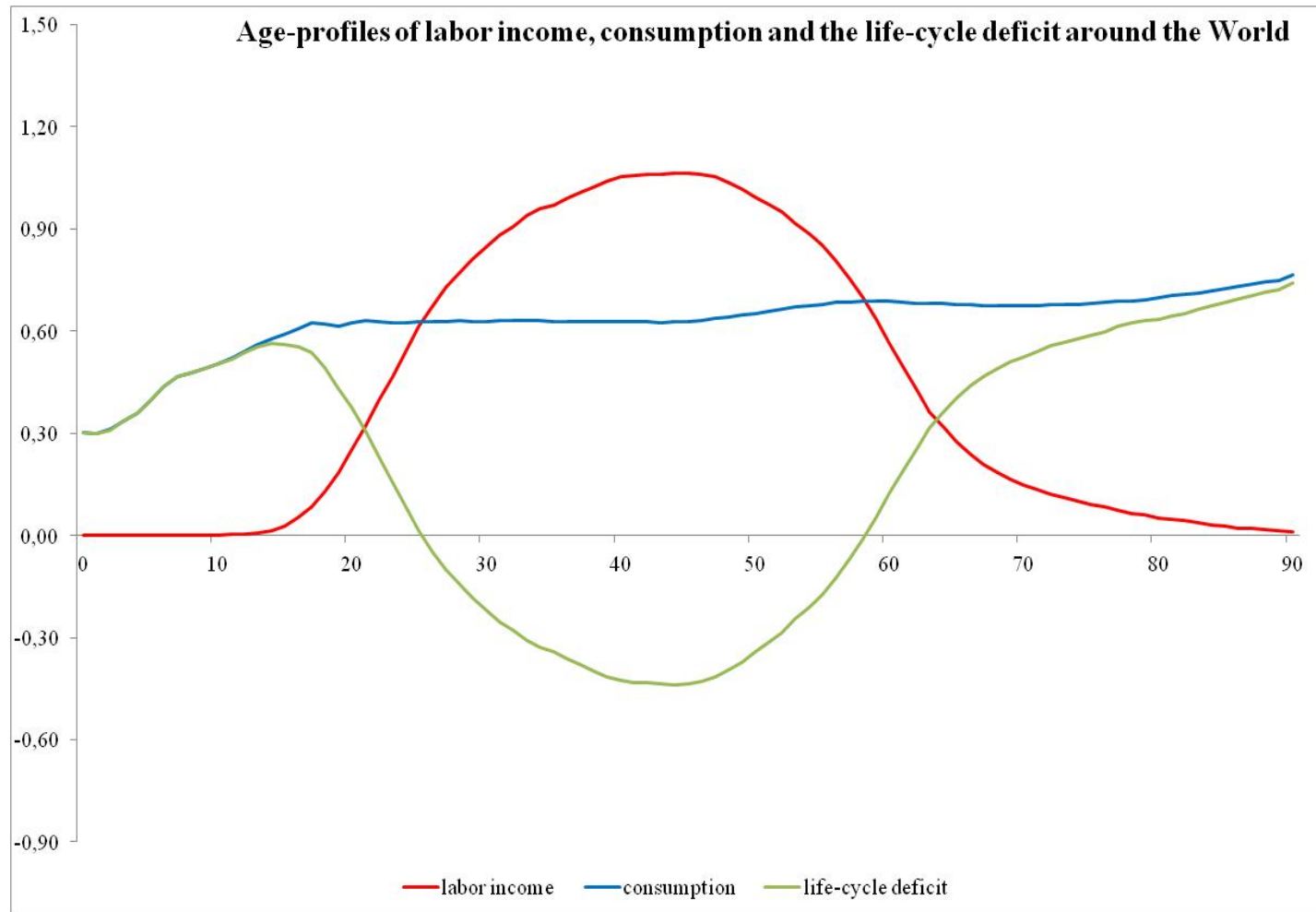
An equation of national accounts reordered

Resources = Uses

$$\begin{aligned} \text{Labor Income} + \text{Asset-based Revenues} + \text{Public Transfers Received} + \\ + \text{Private Transfers Received} = \\ = \text{Consumption} + \text{Savings} + \text{Public Transfers Paid} + \text{Private Transfers Paid} \end{aligned}$$
$$\begin{aligned} \text{Consumption} - \text{Labor Income} = \\ = \text{Net Asset-based Revenues} + \text{Net Public Transfers} + \text{Net Private Transfers} \end{aligned}$$

What is consumption and labor income netted out?

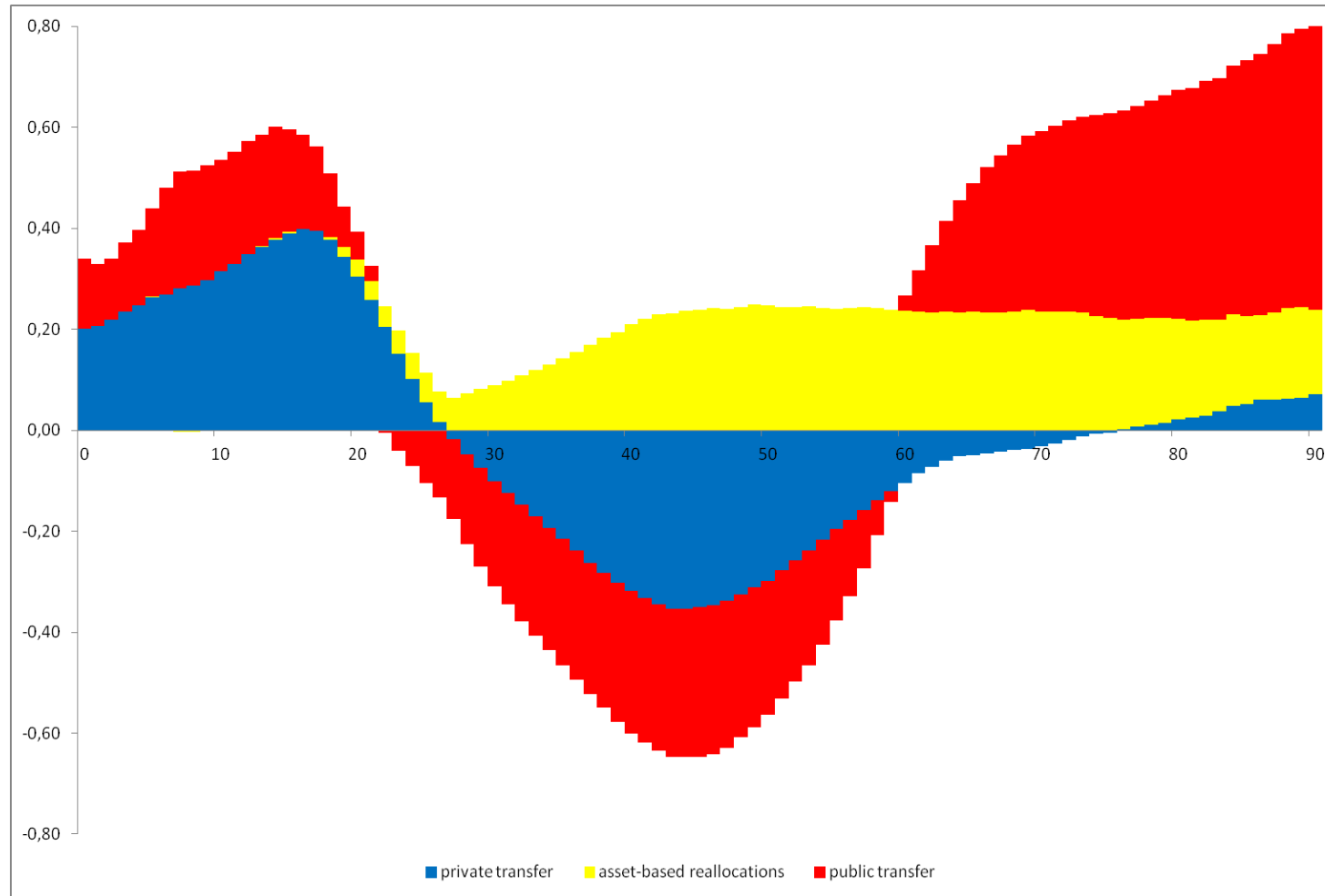
Consumption – Labor Income: the Life Cycle Deficit (LCD)



In cross section, around 2000. Simple average of 23 countries. Per capita figures. Horizontal axis: age of cohort. Vertical axis: YL, C and LCD, respectively as proportion of average labor income of the 30-49 years old cohorts.

Source: calculation based on the www.ntaccounts.org data.

Financing the life cycle deficit



In cross section, around 2000. Simple average of 13 countries. Per capita figures. Horizontal axis: age of cohort. Vertical axis: YL, C and LCD, respectively as proportion of average labor income of the 30-49 years old cohorts.

Source: calculation based on the www.ntaccounts.org data.

Some important references:

Theory: Lee (1994a,b)

Method: Mason et al (2009); UN Population Division (2013)

Comprehensive introduction and country studies: Lee and Mason (2011)

Further references and data: www.ntaccounts.org

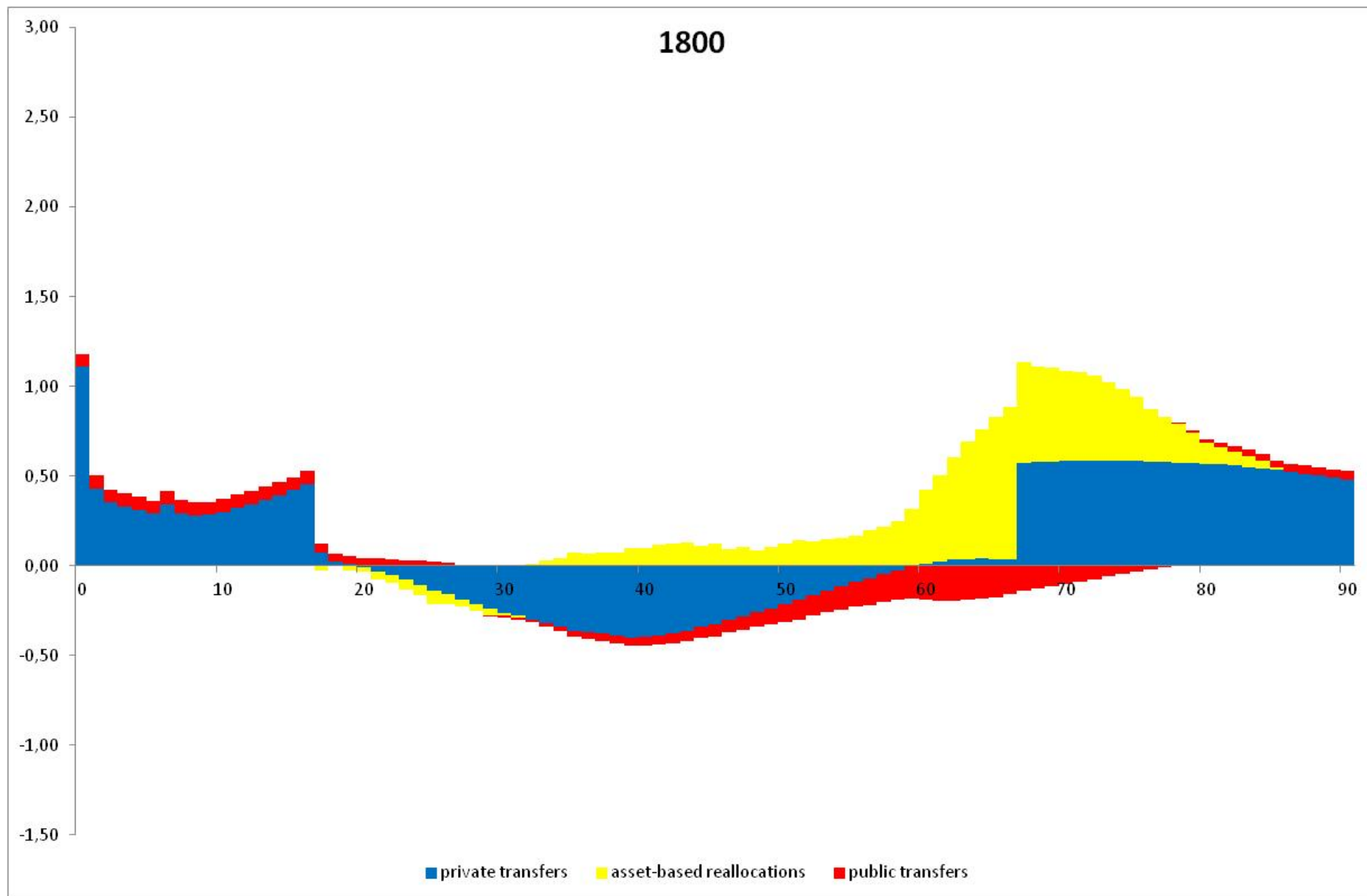
Inter-age reallocations (income smoothing) are managed by a variety of actors, such as households, the market and the state. This system had long existed before the state turned up as one of the actors.

State intervention created a number of positive results but it was not without design errors.

Here I will demonstrate two such errors.

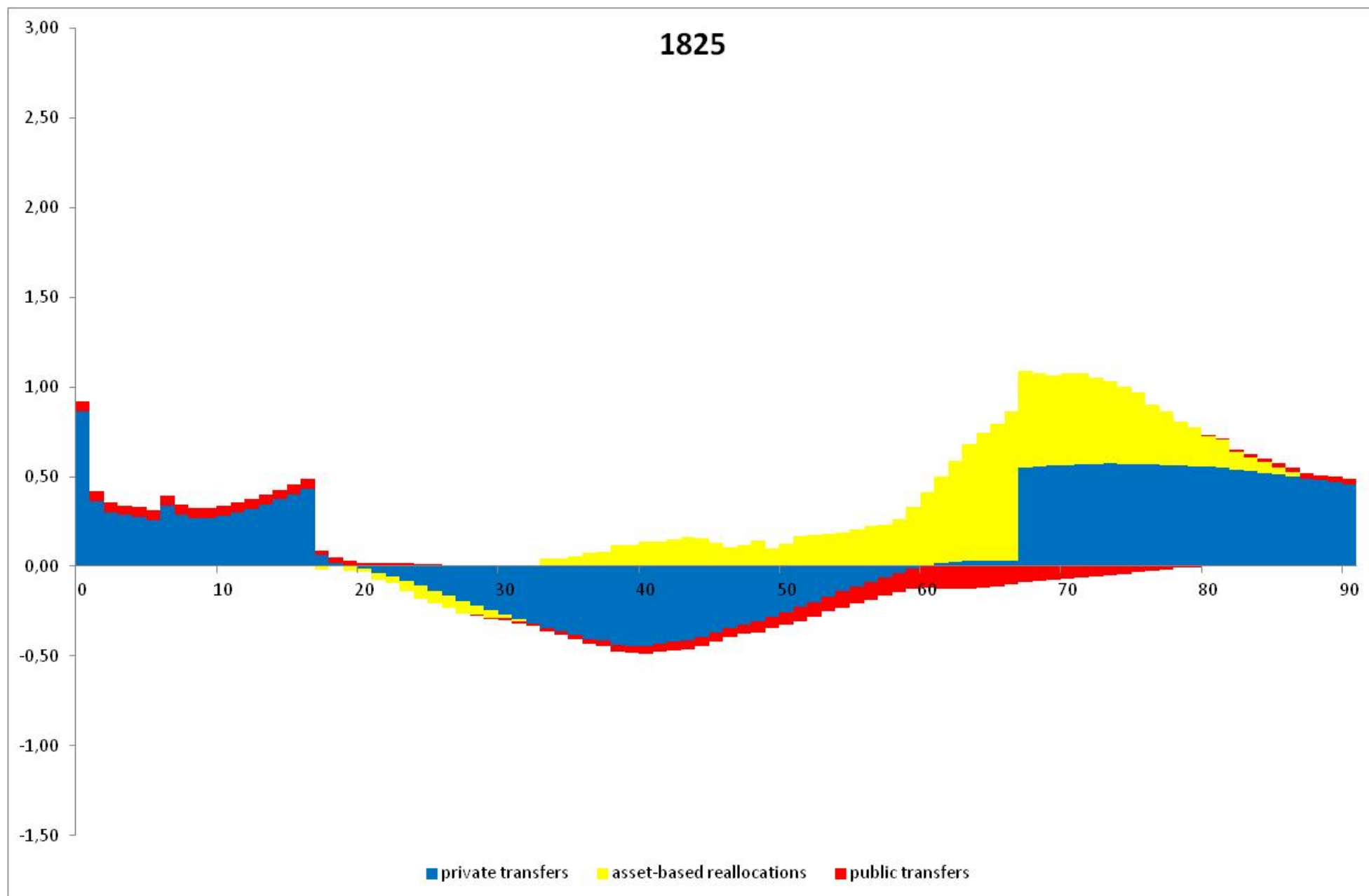
1. In order to maintain long-term stability opposite flows (reallocations downward from the active aged to children and upward from the active aged to the elderly) have to be connected. Currently they are not, neither at the level of public budgets nor at the level of individuals.
Consequences are demonstrated here by a Swedish time series of LCD finances.
2. The state can more easily intervene in upward flows than in downward flows. This asymmetry creates externalities on non-state downward flows, which requires internalization measures.
This will be shown by matching the Hungarian national accounts with the household satellite account.

State intervention in income smoothing: backcasting in Sweden



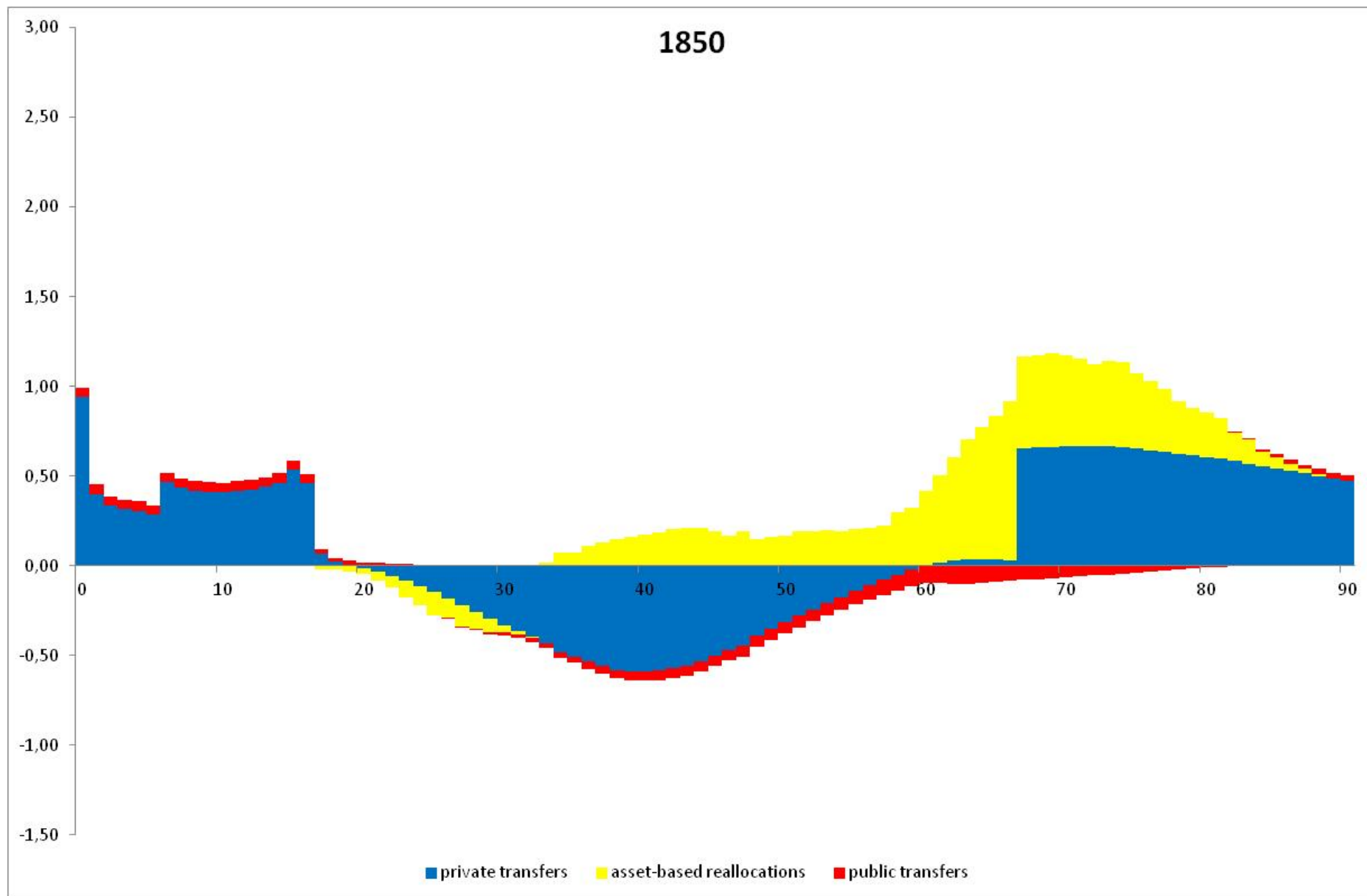
Source: Lindh, Oeberg and Sanchez-Romero, 2011, manuscript

State intervention in income smoothing: backcasting in Sweden



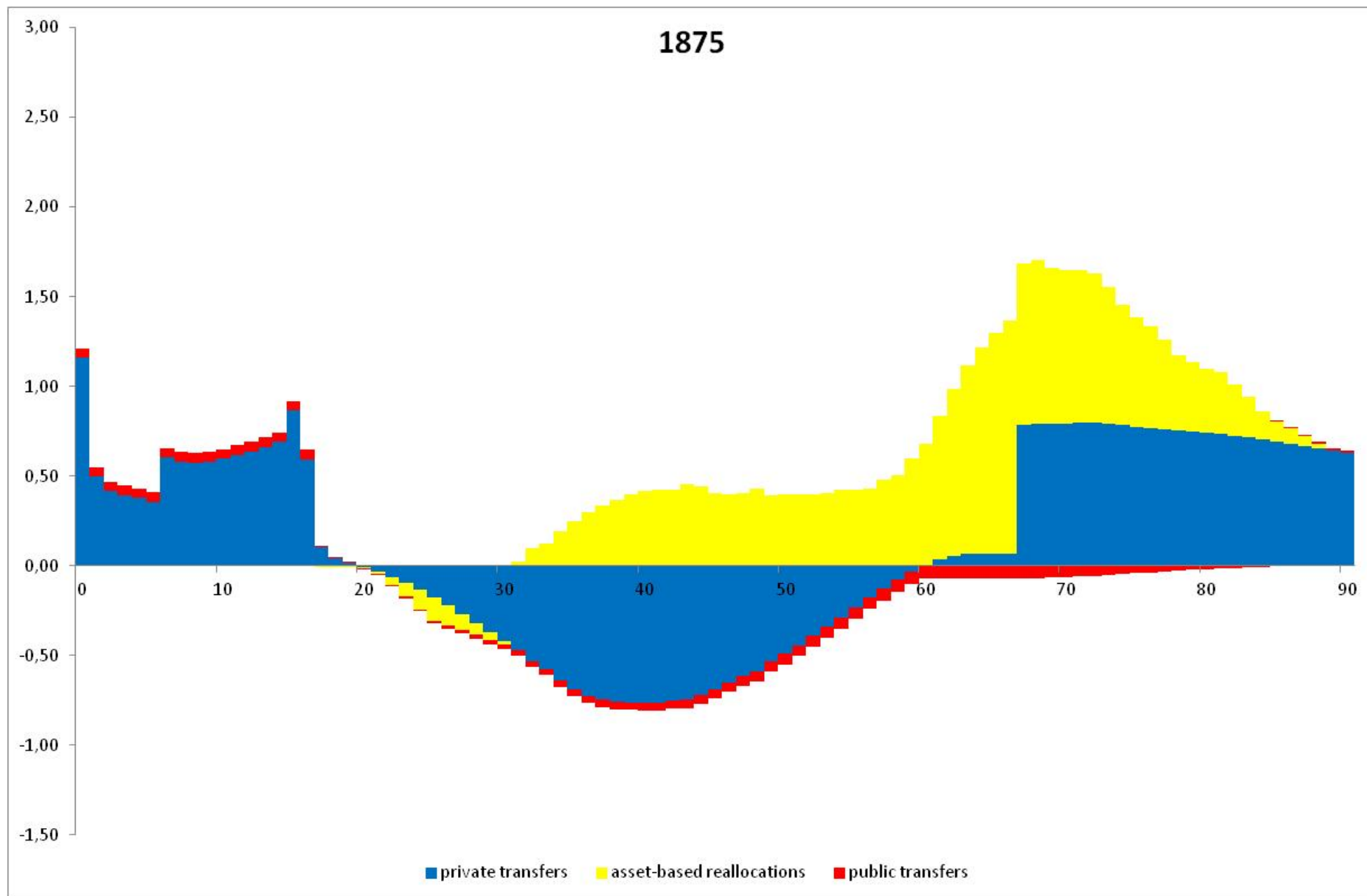
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State intervention in income smoothing: backcasting in Sweden



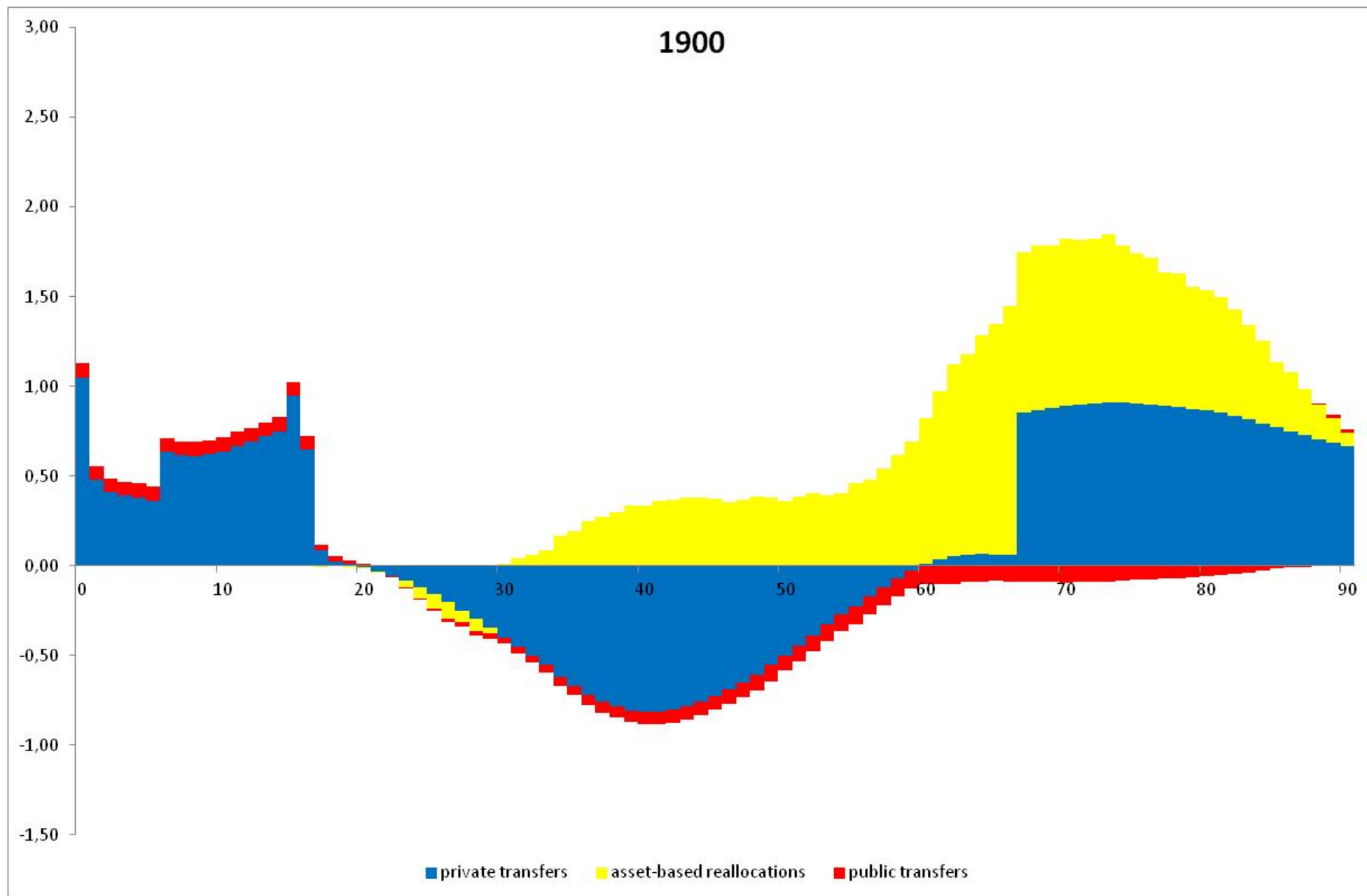
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State intervention in income smoothing: backcasting in Sweden



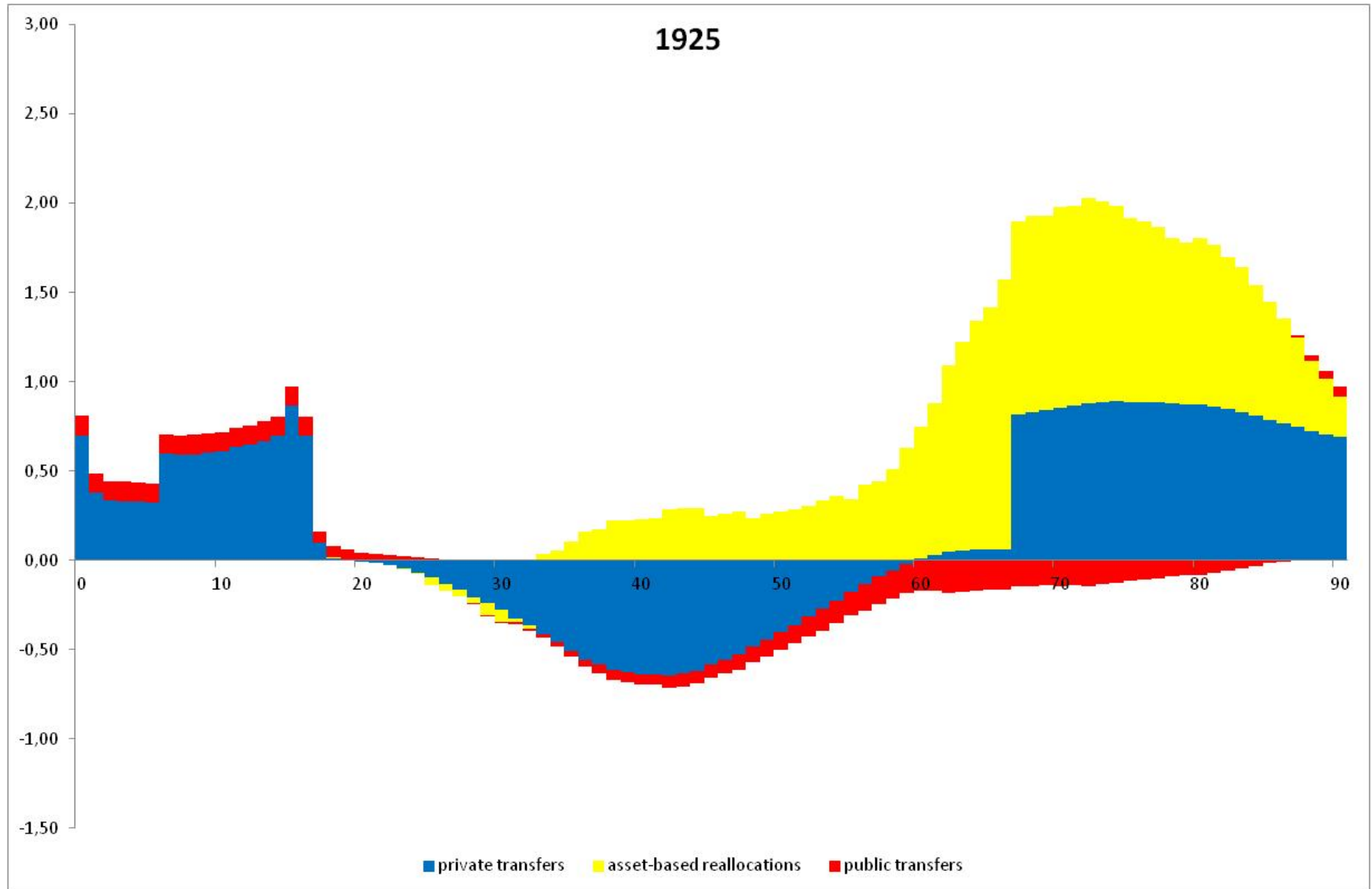
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State intervention in income smoothing: backcasting in Sweden



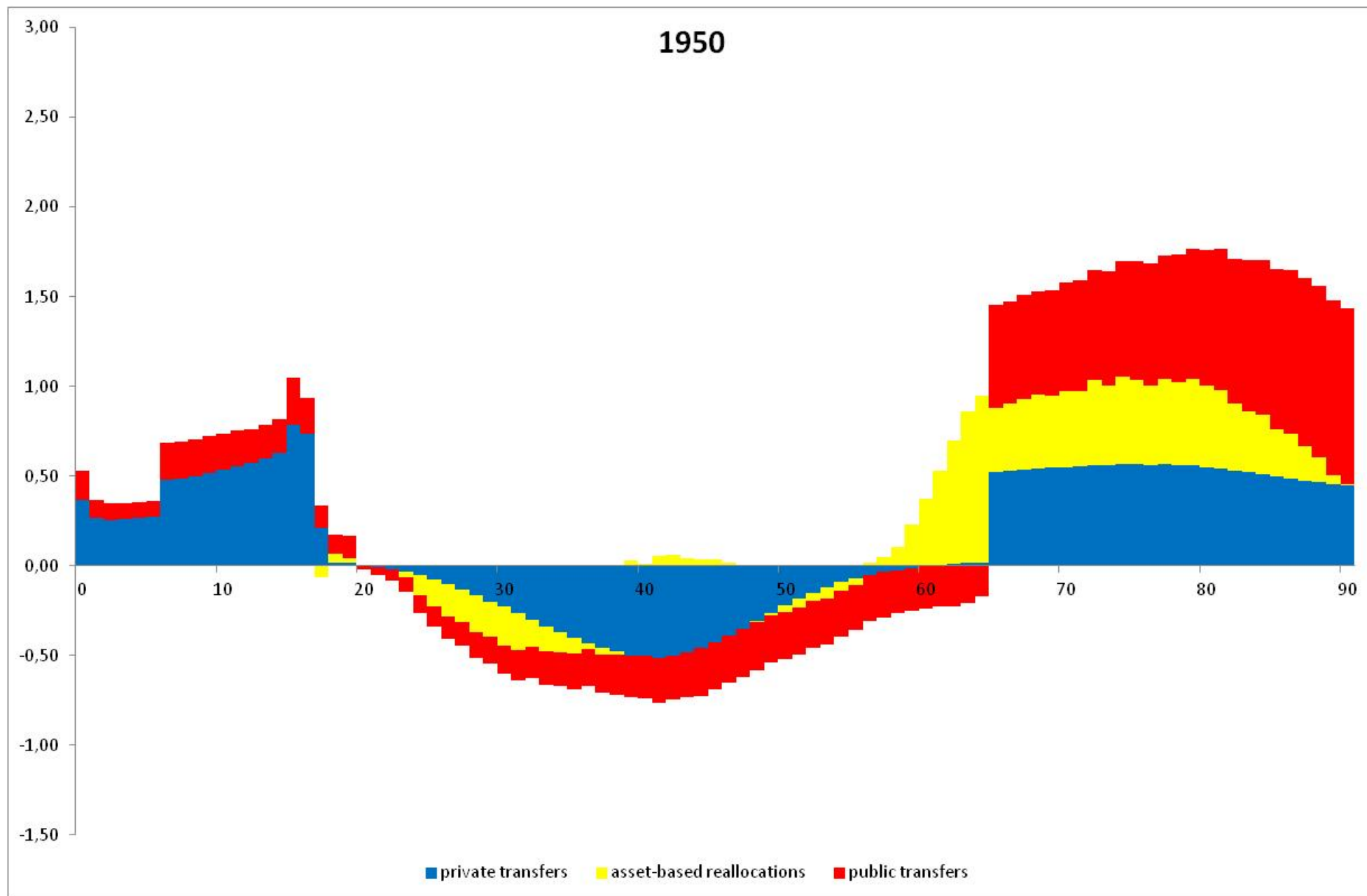
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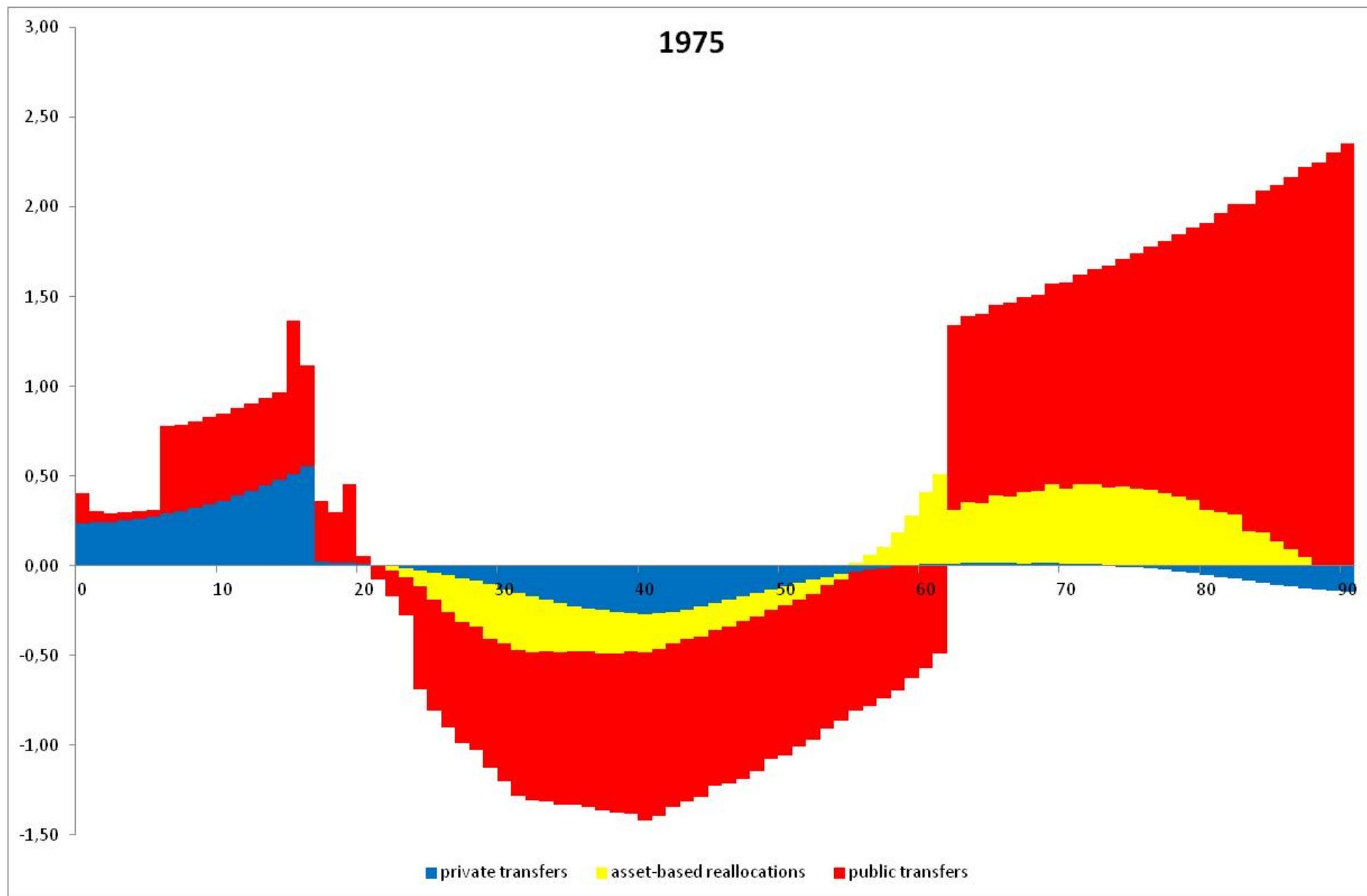
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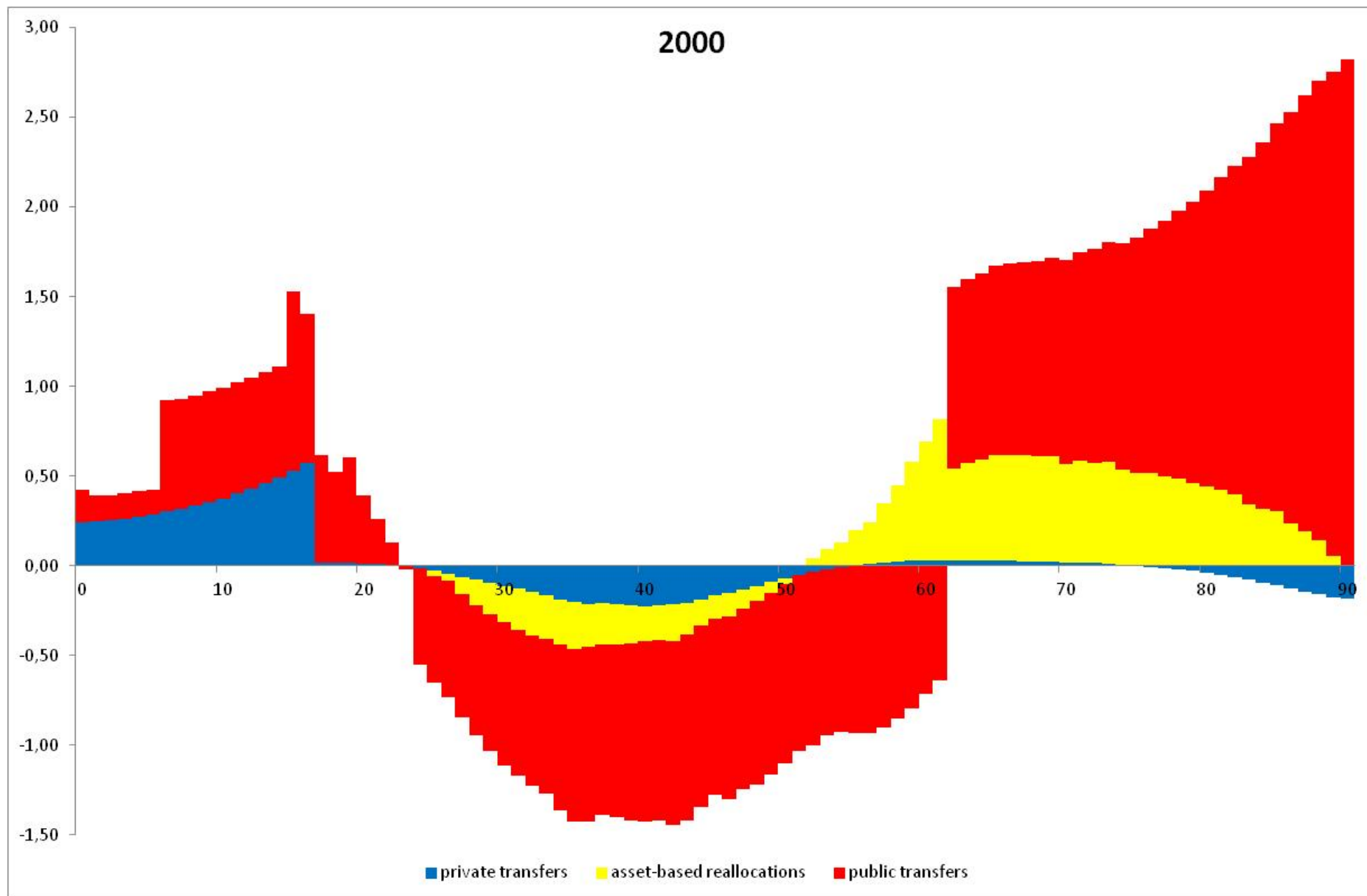
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To sum up:

State intervention made the income smoothing system older in that it changed the downward / upward ratio and, at least in the Swedish case, changed the internal age-composition of upward flows.

The link between opposite flows is weak or non-existent both at the level of institutions and individuals.

Budget planning does not directly take into account the link in question.

Pension formulae and health care eligibilities are independent of individual downward flows.

Inter-age resource reallocations of unpaid household labor

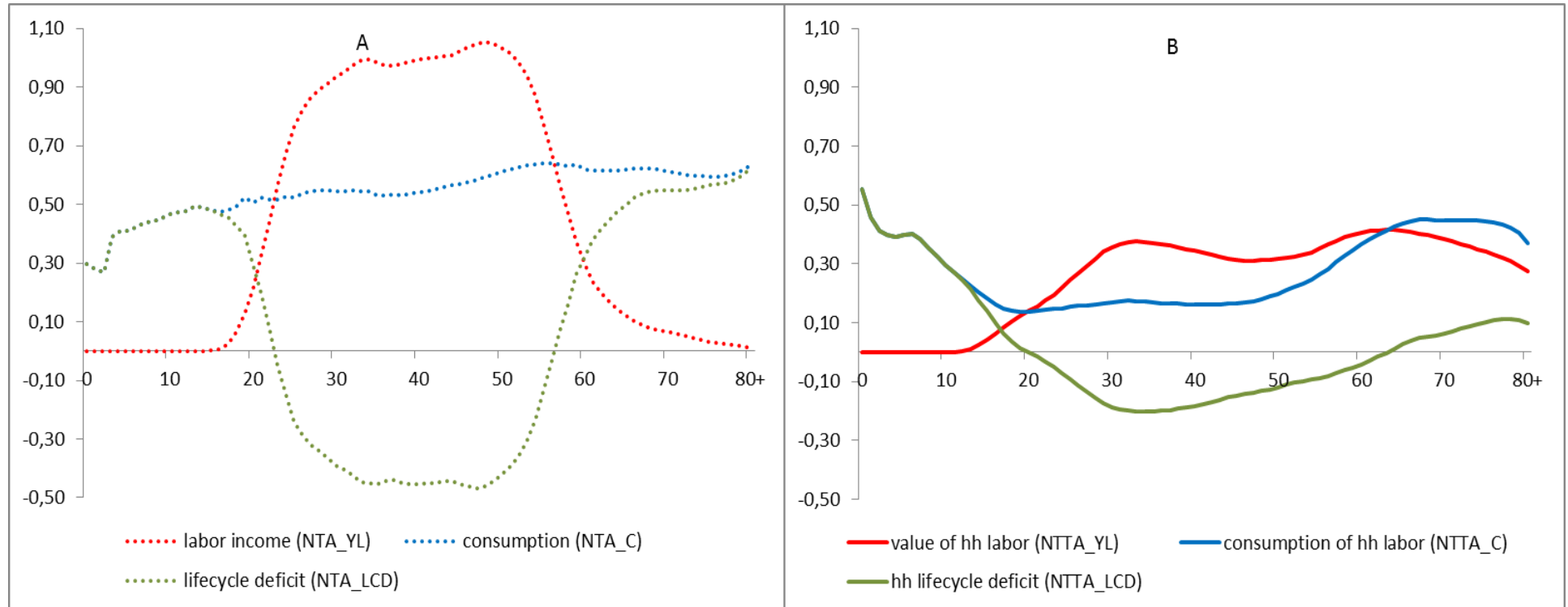
Focusing on inter-age reallocations exclusively in the national income is misleading due to two asymmetries:

1. Division of labor across genders is asymmetric with regard to labor force participation and unpaid household labor.
2. Financing old age can be more easily delegated from the household to market and state institutions.

Age-profiles of the first effect are demonstrated by Donehower and Mejía-Guevara (2012).

Age-profiles of the second effect will be demonstrated below on Hungarian data.

Age profiles of labor income / value of unpaid labor, consumption / use of unpaid labor, and the corresponding life cycle deficit



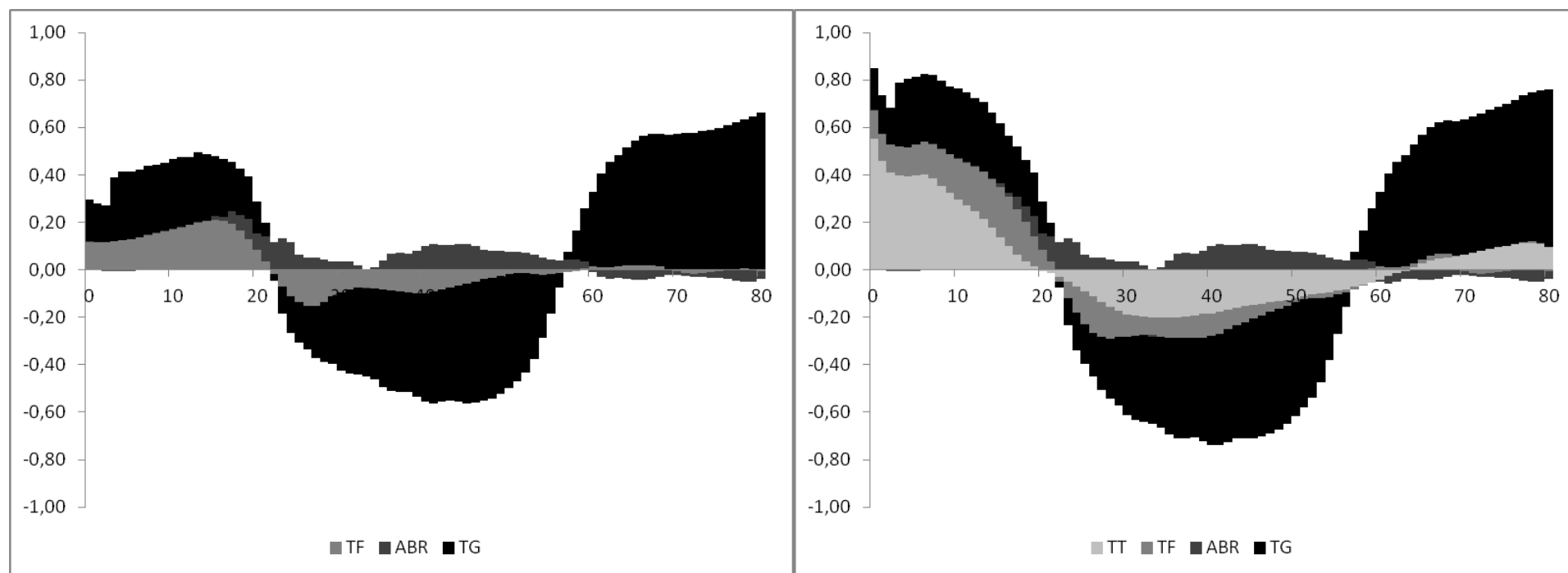
YL, C and LCD in NTA and NTTA, Hungary, 2000

Values are normalized on per capita labor income (NTA) of the 30-49 age bracket.

Methods: Donehower (2012), manuscript.

Source: Gál, Szabó and Vargha (2012), manuscript.

Inter-age resource reallocations in the national income and in the total economic product (national income + value of unpaid household labor)



Time transfers (TT), private transfers (TF), asset-based reallocations (ABR) and public transfers (TG) in NTA and NTTA, Hungary, 2000

Values are normalized on per capita labor income (NTA) of the 30-49 age bracket.

To sum up:

Institutional composition of downward vs. upward resource flows are significantly different. This effect proves to be even larger when unpaid household labor is taken into account.

Children cost to parents, the elderly cost to the taxpayers.

If this is not reflected in eligibility rules, financial externalities are created. Since in many countries this is the case this likely adds to negative fertility trends.