

Comment by Andrew Samwick on
“Population Aging and Intergenerational Transfers:
Introducing Age into National Accounts”
(by Andrew Mason, Ronald Lee, An-Chi Tung, Mun-Sim Lai, and Tim Miller)
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This is a very interesting chapter that seeks to evaluate a methodology for apportioning the traditional National Income and Product Account (NIPA) aggregates to persons by age. This methodology allows us to better understand how demographic trends and fiscal policy interact to change life-cycle consumption and income profiles. It expands the usual generational account framework to include private as well as public transfers, and it illustrates the results for the United States and Taiwan.

The methodology is well summarized by equation (2), given at the household level as:

$$C - y' = (rA - S) + (\tau_g^+ - \tau_g^-) + (\tau_f^+ - \tau_f^-)$$

The left side of the equation is the lifecycle deficit—the amount by which consumption exceeds labor income at a given age. Funding for consumption in excess of current labor income must come from some combination of sources on the right side of the equation: dissaving in excess of capital income, net transfers from the public sector, or net transfer from the private sector. Economists have focused to varying degrees on the first three of these terms. This chapter is the first I have seen to incorporate the last term (private transfers) into a comprehensive analysis by age.

The basis for this methodology is to use nationally representative household surveys to figure out the distribution of NIPA aggregates across the population, where in most cases the distribution is done by age. Unfortunately, most of that apportionment process is not discussed specifically in this chapter, and the interested reader must consult the authors' prior work. At one level, this exercise is analogous to benchmarking the survey total to the NIPA number that was gathered by a different means. In evaluating the methodology in light of the main results, the critical question is whether any of the methods for apportionment presuppose life cycle behavior (e.g., quadratic specifications in age).

The central results are shown in Figures 2, 5, and 6. They show the life-cycle patterns of consumption and production, as well as the aggregate and per capita transfers by age in the two countries. The most novel result is that the period of lifecycle surplus is surprisingly short in both countries. Public and private transfers are particularly large during this period. The data also seem to show very little active saving in these years, despite large asset income in later years. (It is possible that this disparity reflects the influence of cohort effects—asset income may be lower in the future. Alternatively, the year 2000 was a very good one for capital appreciation in the United States. It may be that the asset reallocations are unusually large that year.) Private transfers to the elderly are substantially larger in Taiwan.

The prominence of private transfers in these accounts raises some questions about their economic interpretation. The first question is the extent to which they are voluntary, particularly the transfers to the elderly in Taiwan. Some portion may reflect social customs that impose a burden on the younger generation that they have little choice but to accept. In the traditional national income accounts, there is a similar problem. Some expenditures, like rebuilding after a natural disaster, count for gross domestic product but are a reflection of lower, not higher welfare. How should we change our interpretation of a large private transfer when we believe it to be involuntary?

The second question is the extent to which the private transfers substituting for the life cycle behavior that we have come to expect but have not seen overwhelmingly in the micro data. For example, Figure 2 suggests that in the United States, consumption continues to rise even after life-cycle production has started to fall. However, Figure 6 does not admit much of a role for private transfers. The main components are asset reallocations and public transfers. I think that this reflects in part that the transfer accounts are calibrated to the mean, not the median. Because of the skewness of the wealth distribution, the median would reflect a greater importance of public transfers and a lesser importance of asset reallocations. What would it show for private transfers?

As this chapter is breaking new ground, it is tempting for a discussant to suggest avenues for further research on this topic. The first is consider the next level of disaggregation beyond age. Gender seems to be the natural extension, and this would force the authors to think about other ways of allocating consumption and production within households. The second is to show the calculations in a few different ways. Specifically, health expenditures comprise a large component of the public transfers to the elderly, and education expenditures comprise a large component of both the public and private transfers to the young. It would be interesting to see how important those transfers are in this framework. The authors could show the calculations with and without these expenditures distinguished by type.

Finally, it is worth noting that the variation in this analysis is entirely cross-sectional. The time-series properties of this methodology are still to be investigated, and extending the methodology to multiple years of data is an important direction for further research. There are three areas in which the time-series dimension may shed additional light on life cycle behavior. First, with new data, the life cycle deficits may change, as would the corresponding age reallocations. Second, the allocation rules estimated from micro data might change. Third, it might be possible to distinguish cohort or time effects, which may be important as well.