

## Taking Account...

### Integrating macro and micro income data

In recent years, the distribution of income as an indicator of economic well-being has generated interest academically and politically, amid concerns about widening of income disparities. To more fully explore this issue, a recent research effort at the Bureau of Economic Analysis (BEA) sought to integrate macro and micro income estimates to capture the benefits of both.

Macro estimates of household income and expenditures in the national income and product accounts (NIPAs) produced by BEA measure aggregates and per capita averages. These estimates, however, are limited as measures of social and economic progress because they contain no information about the distribution of income or about other household income classifications, such as by age and by household type.

Micro estimates of household money income and expenditures from the Census Bureau's Current Population Survey Annual Social and Economic Supplement (CPS-ASEC) and from the Bureau of Labor Statistics' Consumer Expenditure Survey (CE) provide information about income distribution, including measures of median household income. However, these measures of cash income and expenditures are more narrowly defined. In addition, users of these measures must grapple with issues related to underreporting, nonreport-

ing, and the underrepresentation of high-income households.

The macro and micro data have provided conflicting signals in recent years. Macro estimates of real per capita disposable personal income (DPI) showed moderate increases from 2000–2008, followed by a sharp decline in 2009, and a small increase in 2010 that left it at about the 2006 level. However, real median household money income derived from CPS-ASEC was little changed between 2000 and 2007 and has since steadily declined. Real per capita DPI was 12 percent higher in 2010, compared with 2000, while real median income fell by 7 percent, for a cumulative difference of 19 percentage points over the 10-year period. Similar differences between BEA estimates and those based on the CE have been noted.

These differences have been much discussed. The faster growth in the national accounts measures—which rely mainly on business surveys, tax information, and administrative data—have been attributed to a number of factors, including the inclusion of in-kind supplements to wages and salaries in the NIPA estimates; the inclusion of in-kind government social benefits, such as Medicare and Medicaid, in the NIPAs; better coverage of high-income individuals; and the overstatement by NIPA data because of the use of average rather than median or quintile data.

The integrated data for 2006–2010 provides insights lacking in any of the existing data sets. For example, controlling the detailed component estimates in the micro sources to the macro values would account for the varying degrees of under-reporting in the micro components. Inclusion of third-party payments and imputations from the macro estimates would account for the 30 percent of personal consumption expenditures not captured in the out-of-pocket expenditures from the CE. Third-party payments are particularly important for health care, where the majority of care is financed by employer-sponsored health insurance and by government programs rather than by out-of-pocket expenditures captured in the CE.

In general, the integrated estimates of household disposable income show a lesser degree of income inequality than the micro estimates largely because of (1) the inclusion of in-kind government social benefits, primarily for health care, that disproportionately benefit lower income households, and (2) the exclusion of personal income taxes, which are paid disproportionately by high-income households. Changes in 2006–2010 show a small narrowing in income discrepancies, reflecting declines in self-employment and property income for the top quintile and increases in government social benefits and lower taxes for the lowest quintile.