

Appendix: How We Estimated Balance Sheets for Different Age Groups

Some of the tables and figures used our estimates for 2013. The data sources we used to create these estimates include the Federal Reserve Board's Survey of Consumer Finances (SCF), the Fed's Financial Accounts of the United States (FAOTUS), the U.S. Census Bureau's Current Population Survey (Census) and the Federal Reserve Bank of New York's Consumer Credit Panel, based on data provided by Equifax Corp.

The SCF and our new 2013 balance-sheet estimates comprise three broad asset categories, two liability categories and the resultant net worth (because assets minus liabilities equals net worth) for each of 18 distinct demographically defined groups of families.¹ We estimated an average balance sheet for each demographically defined group as of the end of the third quarter of 2013. The balance sheets of these groups then were combined to form three age groups: young families (family head under age 40), middle-aged families (family head between ages 40 and 61) and older families (family head above age 62).

We estimated the average value for a family in each of the 18 demographic groups at the end of the third quarter in each of three asset categories—durable goods, business and financial assets, and residential real estate—and in two liability categories—nonmortgage debt and mortgage debt. Steps in the estimation for each category were as follows.

Durable goods: We increased the average holdings of a family in each of the 18 demographic groups by a uniform amount over its 2010 level (derived from the 2010 SCF) such that the aggregate estimated 2013 population-weighted holdings of all families equaled the third-quarter 2013 amount implied by FAOTUS data. In particular, the increase in the inflation-adjusted aggregate stock of durable goods owned by all households in 2013 was constrained to be 1.4 percent larger than the aggregate stock in the third quarter of 2010. We used Census data to estimate the population weights for each of the 18 demographic groups in 2013, so the uniform rate of increase applied to the holdings of 2010 did not equal 1.4 percent.

Financial and business assets: As with durable goods, we increased the average holdings of a family in each demographic category by a uniform amount over its 2010 level, which was derived from the SCF. We again imposed the requirement that the increase in the inflation-adjusted aggregate stock of financial and business assets owned by all households in 2013 was equal to the increase implied by changes in that category as reported in FAOTUS. To allocate this total increase (which amounted to 19.8 percent), the applied rate of increase was slightly lower due to changes in the population weights between 2010 and 2013.

Residential real estate: Estimation of average housing assets was much more complex than for durable goods or financial and business assets because we have more detailed information about household holdings of real estate in 2013. In particular, quarterly Census estimates of homeownership rates broken down by age, education, and race or ethnicity are available. We used only the age-group defined homeownership rates to create factors relating homeownership rates in 2010 to estimated homeownership rates in 2013 for each of the 18 demographic groups. The factors were 0.924, 0.970 and 1.003 for young, middle-aged and older families, respectively.

Each 2010 homeownership rate estimated from the SCF was multiplied by the age-specific factor to derive an estimate of the group's 2013 homeownership rate. Given the implied number of homeowners in each demographic group, we applied a uniform rate of increase in the value of an average home between 2010 and 2013 such that the population-weighted aggregate value of housing we report for 2013 equaled the amount implied by the FAOTUS estimate of residential real estate for the third quarter of 2013. This aggregate inflation-adjusted three-year increase was 7.8 percent. Due to changes in the size of demographic groups, the uniform rate of increase we applied to all groups was slightly higher to match the aggregate.

Nonmortgage debt: As with residential real estate, we have some detailed information about nonmortgage debt in 2013. In particular, the Equifax data provide age-specific estimates of the incidence and amount of nonmortgage debt owed by families through the end of 2013. The factors we applied to nonmortgage debt balances in 2010 (from the SCF) were 1.1395, 1.1200 and 1.0800 for young, middle-aged and older families, respectively. These factors are consistent with an overall increase of 12.3 percent in nonmortgage debt between the third quarters of 2010 and 2013, as reported in FAOTUS.

Mortgage debt: We used the detailed information about mortgage debt in 2013 available from Equifax to estimate two adjustments. First, the share of families with mortgages declined by 10 percent between 2010 and 2013. Second, we estimated factors of 0.892, 0.919 and 0.927 for average mortgage balances of young, middle-aged and older families, respectively, that had mortgage debt relative to 2010. Combining these two adjustments and applying estimated 2013 population weights to each group, the aggregate amount of mortgage debt we derive is consistent with an overall decrease of 7.3 percent in inflation-adjusted mortgage debt between the third quarters of 2010 and 2013, as reported in FAOTUS.

Net worth: We calculated the average inflation-adjusted net worth of each of the 18 demographic groups as the difference between total assets and total liabilities, where the sums of the categories described above constitute the respective totals.

ENDNOTE:

¹ For more information on the demographic dimensions used in our balance-sheet estimates, see *Emmons and Noeth (2013b)*.