

Evaluating the New Mortgage Questions in the Current Population Survey's 2010 Annual Social and Economic (ASEC) Supplement

By Jessica Semega and Mousumi Sarkar

The “Observations from the Interagency Technical Working Group on Developing a Supplemental Poverty Measure (SPM)” <http://www.census.gov/hhes/www/poverty/SPM_TWGObservations.pdf>, notes that the National Academy of Sciences emphasized the need to adjust the poverty thresholds by ownership status, distinguishing between renters, owners with mortgages and owners without mortgages, as shelter expenses can vary significantly for each. Thus, the supplemental poverty thresholds make a distinction between each. In accordance with this objective, the 2010 Annual and Social Economic (ASEC) Supplement to the Current Population Survey (2009 income year) added questions to establish a presence of a mortgage. The added questions were taken from the American Community Survey (ACS) and they are as follow:

1. *Do you or any member of this household have a mortgage, deed of trust, contract to purchase, or similar debt on this property?* (Variable: HMORT_YN)
2. *Do you or any member of this household have a second mortgage or a home equity loan on this property?* (Variable: HSMORT_YN)

To evaluate the quality of the new 2010 ASEC mortgage questions we compared similar data collected in the ACS and the American Housing Survey (AHS) by a number of selected characteristics. As there are differences in the purpose and the methodology of the three surveys, there are some important caveats that should be noted when comparing them. The key purpose of the ASEC is to provide timely and detailed estimates of income, poverty, and health insurance coverage at the national level. The ACS offers broad comprehensive information on social, demographic, economic, and basic housing data to produce local area estimates. The AHS collects data on the quality of the nation’s housing specifically to address housing policy issues. Data from the AHS is collected every other year, returning to the same addresses year after year, whereas the ASEC collects data annually with about half the sample addresses overlapping each year, and the ACS draws a new sample each month. Both the ASEC and AHS conduct the survey using trained field representatives and telephone interviewers. The ACS is mostly conducted using self reporting on paper questionnaires and mailback, with a percentage done by personal or telephone interview for nonresponse follow up. Differences in emphasis, sample design, collection techniques, and processing methods should be kept in mind with this analysis. Further information on the complexities of comparing the housing data in the ACS and AHS can be found at < [http://www.census.gov/acs/www/ Downloads/library/2009/ ComparisonReport07ACS_AHS.pdf](http://www.census.gov/acs/www/Downloads/library/2009/ComparisonReport07ACS_AHS.pdf) >. For further documentation about the CPS ASEC, see < <http://www.census.gov/apsd/techdoc/cps/cpsmar10.pdf> >

For the purposes of this analysis, it is important to note that the AHS questions are different from those asked in the ASEC and ACS.¹ The AHS specifically excludes home equity loans when asking if there is a mortgage on the property, and subsequently asks separate questions on the presence of home equity lump-sum loans and home equity lines-of-credit. The ACS and ASEC do not explicitly distinguish between home equity lump-sum loans and home equity lines-of-credit and the initial mortgage question does not exclude home equity loans of any kind specifically when asking if there is a mortgage, loan or debt of any kind on the property. This likely causes a higher percentage of homes to have mortgages in the ASEC and ACS compared to the AHS. Also of importance is the difference in what is included in secondary mortgages. The AHS explicitly asks about home-equity lines of credits and the secondary mortgage total includes both home-equity lump-sums and home-equity line of credits, whereas both the ASEC and ACS ask generally about home-equity loans. The AHS counts about 1.2 million households with only one home-equity lump-sum loan. These households are included in the secondary mortgage category. This causes the AHS to show a higher incidence of second mortgages. Lastly, the ACS edits their primary mortgage data so that a household that says “No” to having a primary mortgage and “Yes” to a secondary mortgage would then have the secondary mortgage edited to a primary mortgage. The primary mortgage variable (HMORT_YN) on the ASEC file is not edited in this way, but for consistency with the ACS and AHS the primary mortgage totals shown in all tables have been tabulated this way.

Table 1 shows the percentages of households by tenure and a presence of a mortgage for owner occupied households from each of the surveys. Table 2 shows more detailed characteristics: type of residence, region, age of householder, and size of household. (The ACS does not classify “inside/outside metro” and the AHS has regions but not divisions.) Table 3, Table 4 and Table 5 show the weighted counts by these selected characteristics for the ASEC, AHS, and ACS, respectively.

From Table 1, about 67 percent of all households in the ASEC are owner occupied. In comparison, the AHS and ACS show about 68 percent and 66 percent, respectively. Some of these variations are most likely due to the slight differences in time periods in which the surveys

¹ The AHS questions used in this analysis are: 1) Not counting home equity loans, is there a mortgage or any loan on this home? 2) How many mortgages (or loans) are there now on the home? 3) Do you also have a lump-sum home equity loan, that is, a home equity loan that is paid out in a one-time lump-sum amount and that must be repaid over a period of time? And 4) Do you also have a home equity line-of-credit, that is, a home equity loan that allows you to borrow against it as often as you wish, up to a fixed limit? Note that AHS definitions do not usually include home equity lines-of-credit as a mortgage, though home equity lump-sum loans are included. For the purposes of this paper, home equity line-of-credit were included in the second mortgage definition. Primary mortgage was defined as those households saying “yes” to the first question.

are conducted, how they are administered, and weighting. Additionally, in the ASEC and ACS, about 32 percent of all households reported being renters compared to 30 percent in the AHS.²

Table 1. Tenure and Presence of a Mortgage by Survey: 2009						
	ASEC		AHS		ACS	
	Percent	90 percent confidence interval (±)	Percent	90 percent confidence interval (±)	Percent	90 percent confidence interval (±)
Tenure						
All Households	100.0	-	100.0	-	100.0	-
Owner occupied	67.0	0.23	68.4	0.46	65.9	0.17
Renter occupied	31.5	0.23	30.1	0.46	32.2	0.07
No cash rent	1.4	0.06	1.6	0.12	1.9	0.02
Presence of a Mortgage						
Owner Occupied	100.0	-	100.0	-	100.0	-
Primary Mortgage	66.6	0.28	61.1	0.59	67.8	0.07
Secondary Mortgage	14.8	0.21	19.7	0.48	16.9	0.07
Owned without a Mortgage	33.4	0.28	32.0	0.56	32.2	0.34

Source: U.S. Census Bureau, Current Population Survey, 2010 Annual Social and Economic Supplement; 2009 American Community Survey; 2009 American Housing Survey National

Looking at the presence of mortgage as reported in each survey, about 67 percent of owner occupied households in the ASEC reported having a primary mortgage, compared to 61 percent for the AHS and 68 percent for the ACS. Once again the ASEC and ACS percentages are higher than the AHS because they do not specifically exclude home equity loans as the AHS does. The AHS primary mortgages estimate only includes those with a regular mortgage, meaning home equity loans are not included.³

For consistency, the category of secondary mortgages includes regular second mortgages, home equity loans, and those households that reported having both a second mortgage and a home equity loan of any kind (lump-sums or lines-of-credit). Among owner occupied households in the ASEC about 15 percent have a secondary mortgage compared to about 20 percent for the AHS, and 17 percent for the ACS. The higher percentage for the AHS might be the result of using more detailed questions to distinguish between lump-sum home equity mortgages and home equity lines-of-credit. The ASEC and ACS do not have such detail.

² The percent of renter occupied households for the ASEC (31.5%) and the ACS (32.2%) are significantly different and round to 32 percent.

³ Next year's ASEC will most likely show a lower estimate of primary mortgages because the question is going to change to specifically inform the respondent to not include home equity loans.

Households in the ASEC and ACS are classified as owned without a mortgage if they reported owner occupied for tenure and did not report having a primary or secondary mortgage. For the ASEC about 33 percent of owner occupied households and 32 percent of ACS owner occupied households are without a mortgage. In the AHS, a household is owned without a mortgage if they have no primary mortgage, no home equity lump-sum loans, and no home equity lines-of-credit. As such, about 32 percent of owner occupied households in the AHS were classified without a mortgage.⁴

For use with the SPM, there is a recode variable, (HPRES_MORT) on the 2010 CPS ASEC file that indicates presence of a mortgage, be it primary or secondary. HPRES_MORT excludes those households that reported a home equity loan. This estimate still might be overstated because respondents were not instructed to exclude home equity loans as a primary mortgage. Using this variable, about 64 percent of owner occupied households reported having a mortgage.

Based on the detailed nature of the mortgage questions in the AHS and the interviewer's ability to aid the respondent in correctly identifying which type of mortgage they have, differences between the ASEC and AHS were expected and occurred. The AHS showed a smaller percentage of households with a primary mortgage and owned without a mortgage, and higher percentage of households with a secondary mortgage than the ASEC. There was less of a difference between the ASEC and ACS for percentage of households with a primary and a secondary mortgage than with the AHS. This should be expected because the same wording was used in both surveys. The adaptation of the ASEC to not allow a household to have only a secondary mortgage and no primary mortgage made the difference between the ASEC and ACS for primary mortgages smaller than the difference between the ASEC and AHS. Given the results of the ASEC comparison to both surveys, it is our conclusion that the new ASEC mortgage questions are capturing the mortgage status information as expected and will provide satisfactory results for use in the SPM.

Changes for the 2011 ASEC

For the 2011 ASEC an edit will be added to rectify the differences in the data based on the ASEC currently allowing a household to have only a secondary mortgage. The SPM thresholds specifically exclude home equity loans when considering homes with mortgages because home equity loans are not necessarily used for shelter and may not reflect shelter costs. To be

⁴ The difference between the percentage of owner occupied households without a mortgage in the ACS and AHS is not statistically significant.

consistent with the SPM thresholds, the 2011 ASEC questionnaire, will instruct respondents to exclude home equity loans. The second question will be as follows:

Not counting home equity loans, do you or any member of this household have a mortgage, deed of trust, contract to purchase, or similar debt on this property?

This question would be followed by the current question asking specifically about a second mortgage or a home equity loan.