

Hypothesis #5 (intra-household allocation of money) could not be tested by these data, and can probably be tested only by ethnographic, case-study methods. It is not expected to be a major factor, but may account for some small proportion of high-income food insecurity.

It appears, then, that a large proportion of the middle- and high-income food insecurity and hunger measured by the CPS is genuine, not artifactual or a result of erratic responses. The most important reasons appear to be temporal mismatch/uneven income (hypothesis #1) and unusually high economic needs (hypothesis #4). Upper bounds on hypotheses #2, #3, and #6 place their combined contribution at no more than 20 percent, and probably substantially less. Hypothesis #5 is not expected to account for more than a very small proportion of the remainder. By default, this leaves hypotheses #1 (temporal mismatch/uneven income) and #4 (unusual economic needs), or other factors not considered here, to account for most of the food insecurity and hunger among higher income households. A modest role for the former is demonstrated in this analysis, and a larger role is not ruled out. The latter, very important, hypothesis could not be tested with the CPS data, nor could the full extent of the former be estimated. An adequate test of both of these hypotheses and estimation of the magnitude of their effects will be possible when data from longitudinal surveys, with expenditure information as well as the food security measure, become available.

### **Future Research Directions**

Further research attention might usefully be given to understanding the causes of food insecurity and hunger in middle- and high-income households. In particular, analysis of longitudinal data such as the Survey of Program Dynamics (SPD) and the Panel Study of Income Dynamics (PSID) may shed light on how changes in household composition and variability in income affect household food security. It will also be important to assess the extent to which such households have resources to cope with episodes of food insecurity, as well as whether action is needed to ensure that they have access to enough food for healthy, active living and for the well-being and sound development of their children.