


# INCOME VOLATILITY



Household income volatility in the form of month-to-month changes in income has important implications for food and nutrition assistance programs. Because the programs have monthly income eligibility criteria, fluctuations in income can cause some families to cycle in and out of eligibility. The combination of means-testing and volatile income affects eligibility requirements, certification periods, and certification error rates. Understanding the implications of income volatility on food assistance programs is particularly important if the programs are to effectively serve the needy.

## Research Highlights

### *Income Volatility and Food Stamps*

The Food Stamp Program is the principal food and nutrition assistance program. It is especially important to understand the program's effect on stabilizing fluctuations in household income and food consumption.

### *Food stamps reduce income volatility and stabilize food consumption*

Gundersen and Ziliak (2003) examined the effect of food stamps on income and food-consumption volatility. Treating food stamp benefits like income, food stamps reduced income volatility across all families by about 3 percent and, in turn, reduced food-

## Research Summary

FANRP research has informed understanding of the causes and impacts of income volatility. Income volatility is especially high for poorer households. This volatility causes low-income families to cycle in and out of eligibility for food assistance and may affect food insufficiency. Employment factors, such as total hours worked by household members, are a major cause of income volatility. Food stamps reduce the effects of income volatility on the household and stabilize food consumption. Because of income volatility, the risk of food stamp errors, whereby wrong benefit amounts are received, increases with the length of the certification period. While short recertification periods reduce error rates, they also reduce participation in the Food Stamp Program.

consumption volatility by about 4 percent. More importantly, the stabilizing role of food stamps on income and food consumption was much more pronounced among those most in need (i.e., families with high probabilities of food stamp participation), where food stamps were found to reduce volatility by 12 and 14 percent, respectively.

### ***Nonparticipant households are more likely to experience short-term drop in income than participant households***

The dynamics of household income are an important factor in Food Stamp Program participation decisions. Farrell et al. (2003) found that eligible nonparticipant households experienced substantially more variability in their monthly income and earnings than did participant households. In particular, many nonparticipant households had a short-term drop in income. That is, while current reported household income was low enough to meet the income test in a given month, this was a transitory phenomenon. This result is consistent with the premise that expectations of higher future income explain why some nonparticipant households do not participate.

### ***The food stamp cycle impacts food intake patterns***

Wilde and Ranney (2000) were the first to use nationally representative

data to examine the food stamp cycle—monthly cycles in food expenditures and food intake among food stamp households. Average food spending by food stamp households was found to peak sharply in the first 3 days after food stamps were received. Food energy intake patterns differed by how frequently the food stamp household made major grocery shopping trips. For food stamp households that shopped frequently, food energy intake remained steady over the course of the food stamp month, ranging from about 78 percent of the RDA to about 81 percent. However, for the 42 percent of all food stamp households who conducted major grocery shopping trips only once per month, mean food energy intake dropped significantly, from 83 percent of the RDA in the first week to 73.4 percent of the RDA in the fourth week. This cycle of food spending leaves some households with less food intake late in the month. These results suggest that bimonthly delivery of food stamp benefits may mediate the intake cycle.

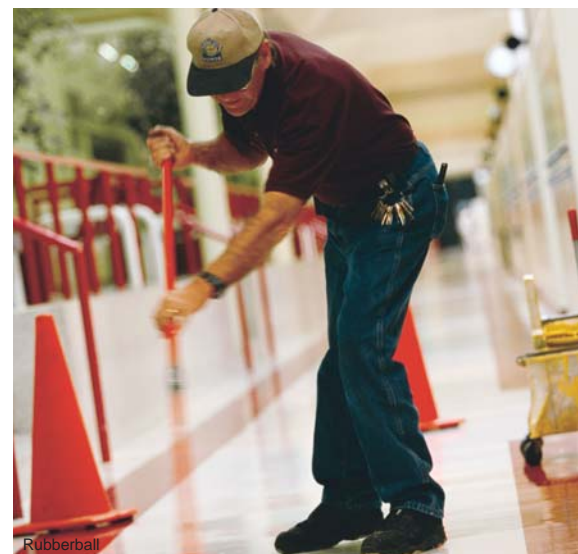
### ***Short recertification periods reduce error rates but decrease program participation***

States are required to recertify most food stamp participants at least once a year. In the late 1990s, many States increased their use of short recertification periods (3 months or less) in an

effort to lower the rate of error in determining food stamp benefit amounts. The rationale for doing this is that more the frequent review of client circumstances results in a more timely reassessment of eligibility and adjustment of benefits. This reduces risk of error, especially for households with volatile incomes. But reducing errors in this manner creates additional burden for clients who must appear for an interview and provide documentation. This additional effort on the part of clients may discourage participation by eligible households. Thus, there is a tradeoff between lowering errors rates and encouraging program participation. Kabbani and Wilde (2003) found that short recertification periods reduced States' error rates and that greater use of short recertification periods was associated with lower food stamp participation rates. They estimated that using short recertification periods to reduce error rates for working households by 1-percentage point would result in a 3.4-percent decline in participation rates for these households.

### ***Income Volatility and Other Food Assistance Programs***

FANRP has also contributed to an understanding of the implications of income volatility for the National School Lunch Program and WIC.





### ***Income volatility helps to explain “overcertification” in the National School Lunch Program***

Newman (2006) looked at how month-to-month changes in income volatility among households with children affected eligibility for free and reduced-price lunches in the National School Lunch Program. Prior to recent changes in program regulations, such income volatility meant that children in these households moved back and forth across the program’s eligibility threshold. Eligibility status in almost one-third of all households changed within a year (fig. 6-1). For households with income below 185 percent of poverty – the eligibility threshold for a reduced-price lunch – two-thirds had income above the threshold in at least 1 month that year. An estimated 27 percent of households that were income eligible for subsidized lunches at the beginning of the school year were no longer income eligible for the same level of subsidy by December due to monthly income changes. These month-to-month changes could feasibly explain a large portion of the estimated overcertification rates under the prior rules.

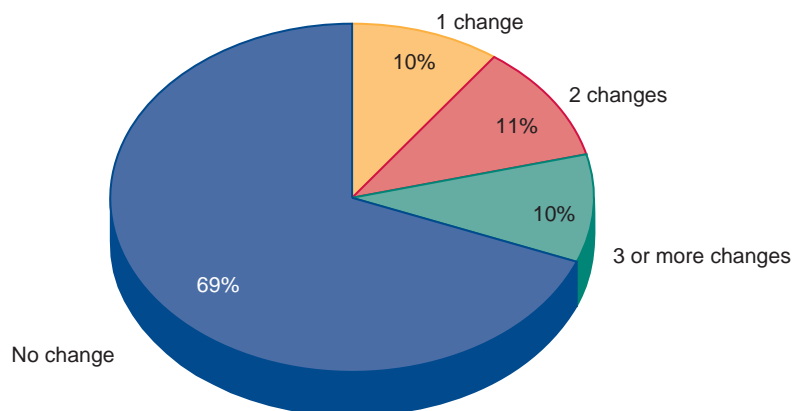
### ***Employment factors are associated with income volatility***

Newman (2006) found that among households with children, the lower a household’s income, the more likely it is to face volatile swings in monthly income. For example, the monthly income variation for households below 75 percent of annual poverty was double that of households above 300 percent of annual poverty. The most important factors associated with exit from or entry into eligibility for reduced-price school meals (i.e., an increase or decrease in income relative to 185 percent of poverty) were similar. In both cases, changes in total household hours worked and in the share of adults working were the most

Figure 6-1

### **Number of changes in National School Lunch Program eligibility status among all households, 1996-97**

*Eligibility status changed in one-third of all households within a year*



Source: Newman, 2006.

likely to lead to exit or entry. The results point to the importance of the labor market participation of all household members as a source of short-term income volatility.

### ***Income variability has implications for eligibility in the WIC program***

To receive WIC benefits, applicants must live in a family with income less than or equal to 185 percent of the Federal poverty guidelines (or they must be enrolled in certain means-tested transfer programs). Income eligibility is checked only at enrollment and periodic recertification intervals. Once they are enrolled, infants are certified for 12 months of eligibility while children are certified for 6 months. A study conducted by the National Research Council (2003) concluded that because of the variability of income over the course of the year, especially around the birth of a child, a significantly greater number of people are eligible for WIC based on monthly income eligibility versus annual income. For example, compared with the use of annual income, 50 percent more infants and 35 percent more children may be income eligible for WIC based on

monthly income and certification periods.

### ***Income Volatility and Food Insufficiency***

#### ***Food-insufficient households have a greater variance of income***

Gundersen and Gruber (2001) examined the relationship between income volatility and food insufficiency (defined as “sometimes or often did not get enough to eat”). While low average income is an intuitively appealing explanation for food insufficiency, the coexistence of food-sufficient households with incomes below 50 percent of the poverty line and food-insufficient households with incomes above 150 percent of the poverty line is evidence that mean income and food insufficiency are not perfectly correlated. Results of the study indicate that food-insufficient households were disproportionately likely to suffer from income shocks associated with the loss of earnings or food stamps. Food-insufficient households were also shown to experience a greater variance of income, measured as a proportion of mean income, than food-sufficient households.