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FEATURE

Income Volatility Complicates Food Assistance

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- Income fluctuations cause low-income families to cycle in and out of eligibility for food assistance.
- Twenty-eight percent of U.S. households with children experienced at least one monthly income change in the late 1990s that put them above or below the eligibility criteria for many programs.
- Income volatility helps explain why many school lunch beneficiaries were found to be ineligible during verification in past years.

USDA food assistance programs aim to provide a safety net for low-income families in times of need. Temporary declines in family income—of 6 months or so—are commonly thought to be the main problem that recipients face. But many low-income families face more frequent and larger income fluctuations than do higher income families. Most often, a change in hours worked, wages, or the number of household members working is responsible for these fluctuations. Changes in marital status can also cause large income swings. This constant income volatility affects the targeting of benefits in USDA food assistance programs. Just which families are in need, and for how long?

F E A T U R E


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Incomes of Poor Families Are Volatile . . .

ERS investigated common sources of short-term income volatility using data from the 1996 panel of the Survey of Income and Program Participation (SIPP). SIPP is a nationally representative survey conducted by the U.S. Census Bureau to collect monthly information from the same panel of households for up to 4 years. The study used data from 1996 to 2000, looking at changes over the whole 48 months and changes within the 3 school years during that period.

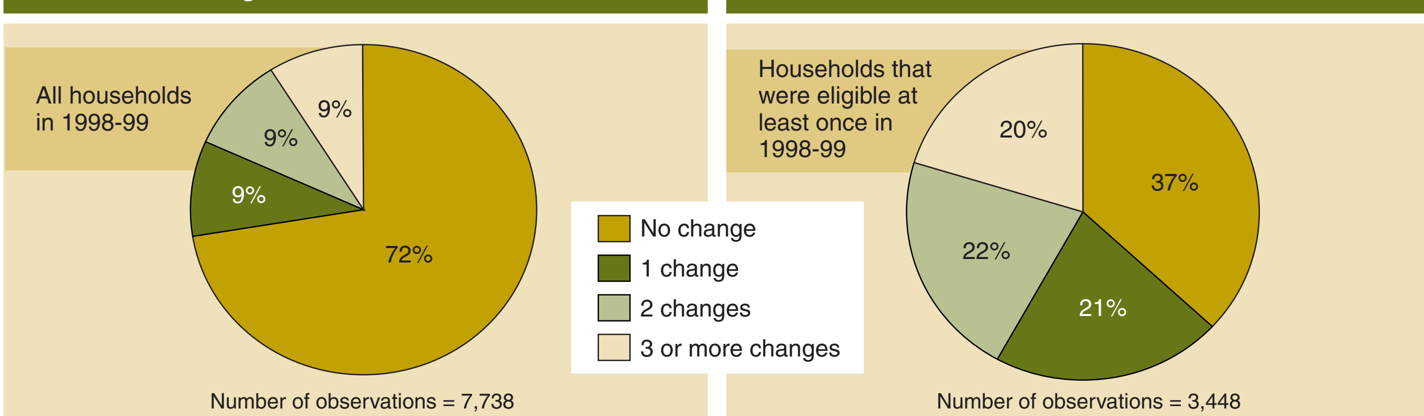
Eligibility for food assistance programs is usually determined by comparing household income with the poverty level. (Federal poverty guidelines are set each year by the Department of Health and Human Services and vary by the number of household members.) To be eligible for food stamps, a household's gross monthly income must not exceed 130 percent of the poverty level. The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the National School Lunch Program (NSLP), and the School Breakfast Program use 185 percent of poverty as an upper limit on program eligibility: if a family's income exceeds that limit, the family is not eligible for WIC benefits or free or reduced-price school meals (unless they participate in other associated programs).

The ERS study found that, within 1 year, 28 percent of all U.S. households with children experienced at least one monthly income change that put them above or below the 185-percent-of-poverty threshold, moving them from eligibility to ineligibility or vice versa. Among low-income families, the chances of changing eligibility status were even higher. For households with incomes below 185 percent of poverty in at least 1 month of the year, almost two-thirds had one or more changes in eligibility status, and one-fifth had three or more changes in a single year.

Not surprisingly, households closest to the eligibility cutoff point (185 percent of poverty) experienced the most eligibility changes. Families whose average monthly incomes were between 130 and 240 percent of poverty crossed the eligibility line five times per year, on average.

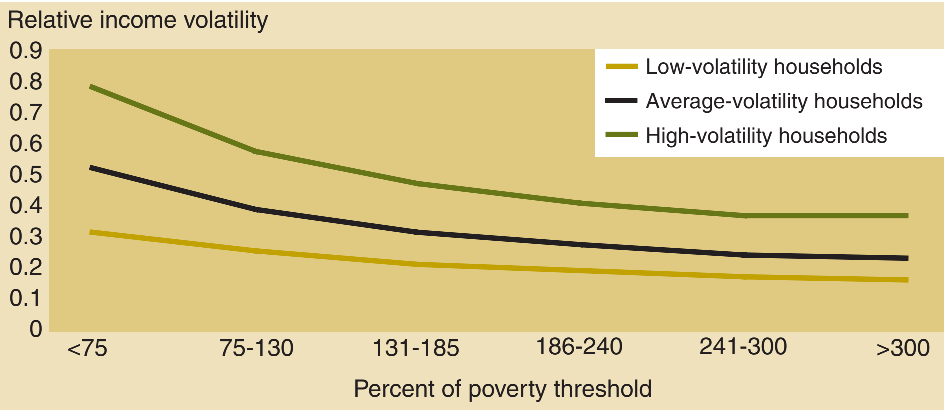
More than a fourth of all households underwent at least one change in eligibility for the National School Lunch Program in the late 1990s . . .

. . . while almost two-thirds of once-eligible households underwent at least one eligibility change



Source: ERS analysis of the Survey of Income and Program Participation, 1996 panel.

Income volatility of lowest income households was double that of highest income households



Source: ERS analysis of the Survey of Income and Program Participation, 1996 panel; number of observations = 11,135.

To compare income volatility across income groups, ERS measured a family's monthly income changes versus its usual monthly income—that is, its relative income variation. (Income is measured as a percent of the poverty threshold.) These relative income changes were higher for poorer families than for higher income families. For hourly workers, a sick child can mean the loss of wages for a day or two, while a seasonal slump in customers can mean a smaller paycheck or even a layoff. In the late 1990s and into the early 2000s, families with the lowest incomes (below 75 percent of the Federal poverty guideline) had relative income changes that were double those of the highest income families (incomes above 300 percent of poverty).

When families are ranked in order of low to high volatility, the family at the median of the poorest group had double the volatility of the median family in the highest income group. The median family in the poorest group experienced volatility half the size of its usual income, while the median family in the highest group experienced volatility one-fifth as great as its usual income. Even for families at lower levels of volatility, the poorest families had roughly double the income volatility of the highest income families.

...And Employment Shifts Are the Main Cause

ERS tested a rich set of events that might trigger an income change, while also controlling for fixed demographic and labor market participation characteristics. Labor market "trigger" events—those changing from month to month—included changes in: (1) the amount of employment, either in the number of jobs held by different members or in the number of hours worked by all household members (total household hours worked); (2) pay rates for different household members; and (3) the percentage of household members working for pay (versus dependents). Since a household's poverty status depends on the number of people in the household, three household composition triggers were considered: changes in the number of children in the household; a marriage, divorce, separation, or death of a spouse; and the addition or subtraction of other adults.

Many of these trigger events could occur in the same month, and they could have opposite effects on the family's income. A household member could lose one job but receive a raise in another job. One member could lose a job, while another chooses to work longer hours, perhaps in response to the other's job loss. A boyfriend or girlfriend could join the household, or an older child could move out.

The fixed characteristics and trigger events most associated with an increase in a household's income (or "exit" from program eligibility) were also the ones most associated—albeit in the opposite direction—with a decrease in a household's income (or "entry" into program eligibility). In both exits and entries, the fixed

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characteristics had predictable effects. For example, when the head of the household had higher levels of education, the household was more likely to exit program eligibility, and when the head of the household had lower levels of education, the household was more likely to enter program eligibility.

Of the trigger events, changes in labor market participation were the most likely to lead to both exit and entry. Changing from a married household to a female-headed one (after becoming divorced, separated, or widowed), although one of the most infrequent changes that occurred across the study group, was the event most likely to lead to entry into eligibility.

The following trigger events were positively associated with exit from eligibility and are shown in order of their statistical significance (their frequency of occurrence over the study's 48 months is shown in parentheses):

- An increase in total household hours worked (27.3 percent);
- An increase in the percentage of working adults in the household (5 percent);
- An increase in wages for a spouse's primary job (8.3 percent).

And the following trigger events were positively associated with entry into eligibility:

- A change from married to female-headed household (0.3 percent);
- A reduction in total household hours worked (33.4 percent);
- A reduction in the percentage of working adults in the household (3 percent);
- Reductions in the wages of the spouse (1.9 percent), other adults (7 percent), and the household head (15 percent).

Overall, the results point to the importance of the total labor market participation of the household as a source of short-term income volatility. The total number of hours worked was found to change most frequently of all events and when it did, it often affected eligibility. The importance of a marital status change, the percentage of working household members, and the pay rates of spouses and other adults in the household also suggests that having multiple household members in the labor force is critical for avoiding poverty-level incomes.

Income Volatility Helps Explain School Lunch Certification Errors

When a family applies for benefits from a food assistance program, program staff assess eligibility based on whether the family's current income—often monthly—is below the program's limit. If so, the family is then "certified" to receive program benefits for some number of months. To target benefits to the needy more precisely, the certification period could be shortened—from, say, 6 months to 3 months. But shorter certification periods are more costly to administer, and they may deter eligible households from applying because of the need to re-apply more often.

In 2004, Congress passed legislation that changed the eligibility period for free and reduced-price lunches under the NSLP from 1 month to the full school year. Previously, families were required to report monthly income increases during the school year that could have made them ineligible. Such changes were rarely reported, and thus schools rarely changed the eligibility status of students due to changes in household circumstances. At the same time, administrators, through the verification process, sought to reduce the number of students receiving meal benefits for which they were not eligible, estimated in most studies to be around 15 to 20 percent of students. Evidence now suggests that this problem of "overcertification" found at the time of verification was affected by the 1-month eligibility period.

The NSLP provides free lunches to students from households with incomes at or below 130 percent of poverty and reduced-price lunches to students from households with incomes between 131 and 185 percent of poverty. Every year, schools are required by law to request income documentation by mid-November (before 2004, it was by mid-December) from a small sample of households whose children receive free or reduced-price meals. Such verification can result in adjusted or terminated benefits.

In the past few years, USDA's Food and Nutrition Service (FNS) has sponsored several studies to measure possible sources of error in the application, certification, and verification processes. They investigated, among other things, the extent to which households misreported their incomes or to which schools made administrative errors. ERS examined another potential source of error: income boosts that would have caused households eligible at the start of the school year to become ineligible by the time their incomes were verified by schools later in the year.

For each of three school years in SIPP (1996-97, 1997-98, and 1998-99), ERS tracked the month-by-month eligibility of households that were income eligible in August. By December—when a sample of incomes would have been verified by the school—27 percent of households had become ineligible. Most (57 to 60 percent) of those that had become ineligible for either benefit by December were households that had been eligible for reduced-price meals in August.

So, estimated overcertification due to income volatility (27 percent) is higher than most estimates of total overcertification (15 to 20 percent) from verification samples. Other overcertification studies estimated two other sources of error—administrative and household error—to be around 10 to 12 percent. By itself, monthly income volatility could have accounted for all of estimated NSLP overcertification identified at the time of verification. However, since the ERS analysis counted all eligible households—not those that actually applied in the years examined—ERS's estimate of error due to income volatility may be thought of as an upper bound estimate. The other sources of error remain, and FNS continues to measure their contributions to total errors. With the extension of the NSLP certification period from 1 month to the full school year, the problem of income volatility, which is extreme for some households, has been resolved.

Income Volatility Invites a Rethinking of Food Assistance

The high and persistent income volatility among potential food assistance recipients has implications for how these programs are run. If a program's certification period is short—say 1 month, requiring recipients to reapply each month—potential applicants may choose not to apply even though they may be eligible. It is also more expensive to administer shorter periods. On the other hand, a long certification period increases the chances that a recipient household's income will rise above the eligibility threshold. This income "creep" challenges many people's notion of the integrity and purpose of a food assistance program. Program administrators attempt to balance program access and integrity, and income volatility is a complicating factor.

With welfare reform, an increasing proportion of the target population for food assistance is working rather than relying strictly on public assistance. Among food stamp recipients, 29 percent had labor market earnings in 2004, up from 19 percent in 2000. And it is the vicissitudes of the labor market that underpin most short-term income volatility. So, is being needy defined only to the extent that income falls below a certain fixed amount? Or should neediness include being buffeted by low, fluctuating, and uncertain income? These findings invite reflection on the way we think about the concepts of "needy" and "eligible." AW

A sick child can mean the loss of a day's wages or even the loss of a job.

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This article is drawn from . . .

The Income Volatility See-Saw: Implications for School Lunch, by Constance Newman, ERR-23, USDA, Economic Research Service, August 2006, available at: www.ers.usda.gov/publications/err23/

You may also be interested in . . .

Income Volatility and the Implications for Food Assistance Programs: A Conference of IRP and the Economic Research Service of USDA, May 2002, available at: www.irp.wisc.edu/publications/focus/pdfs/foc222.pdf

The Relationship of Earnings and Income to Food Stamp Participation: A Longitudinal Analysis by Mary Farrell, Michael Fishman, Matthew Langley, and David Stapleton, E-FAN-03-011, November 2003, available at: www.ers.usda.gov/publications/efan03011/