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# Food Stamp Certification Periods and Payment Accuracy

## State Experience During 1997-2001

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### Abstract

Quality control (QC) reviews of Food Stamp Program (FSP) cases show that error rates across States range from less than 5 percent to more than 25 percent when both overpayment and underpayment error are combined. This study uses QC data for 1997-2001 and a Markov probability framework to characterize year-to-year national and State error rates into variations due to errors occurring with first-month cases (those approved at initial certification); ongoing cases (those subject to the interim action process); and expiring cases (those subject to the recertification process). This information can be used in planning corrective actions by focusing attention on phases of the administrative process that are more responsible for errors. This study also explores the effect on payment accuracy and FSP participation of more frequent recertification of food stamp cases. A motivating concern is that the use of short certification periods (3 months or less) as a strategy to reduce case error may unintentionally reduce program participation.

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# Executive Summary

This study explores the effects on payment accuracy and household participation in the Food Stamp Program of more frequent recertification of food stamp cases. A motivating concern for this research is that the use of short certification periods (three months or less in duration) as a strategy to reduce error among cases with earnings may unintentionally reduce program participation among such households.

This research on food stamp error and participation has three major objectives:

- to examine recent year-to-year national trends in error rates as affected by three food stamp administrative processes—initial certification, interim action, and recertification;
- to examine state-by-state differences in error rates and to diagnose the performance of low-error and high-error states in terms of their effectiveness at conducting initial certification, interim action, and recertification; and
- to examine the extent to which more frequent recertification, as a measure intended to reduce payment error especially among cases with earnings, may inadvertently lower program participation.

This research uses a probability model to explain the underlying month-to-month dynamics of the food stamp case error rate (the average monthly percentage of active cases that are in error) and the aggregate food stamp participation rate (the average monthly percentage of U.S. households that receive food stamps).

There is considerable variation in case error rates among states, ranging from less than 5 percent to more than 25 percent (combining both overpayment and underpayment errors, and including both agency-caused and client-caused errors). An important application of the model is to help explain this variation, by establishing the extent to which a state's error rate is attributable to errors among: first-month cases (those approved at initial certification); ongoing cases (those subject to the interim action process); and expiring cases (those subject to the recertification process). This information is especially important for planning corrective actions, so that state and local program directors can focus attention on the phase of the administrative process that is most responsible for errors.

## Analytic Framework

In analyzing food stamp error, this study focuses on the case error rate, defined as the percentage of active cases whose benefits have been incorrectly computed. Each U.S. household is considered as belonging each month to one of five groups, according to whether

the household is participating in the Food Stamp Program and (if so) whether the household's food stamp payment is correct and whether the household is in the final month of its current food stamp certification period. The five groups are as follows:

- households not participating in the Food Stamp Program (“nonparticipating”);
- correctly paid food stamp cases, not in their final certification month (“ongoing correct”);
- incorrectly paid food stamp cases, not in their final certification month (“ongoing error”);
- correctly paid food stamp cases, in their final certification month (“expiring correct”); and
- incorrectly paid food stamp cases, in their final certification month (“expiring error”).

From one month to the next, each household may remain in its group or experience a transition to another. One can express the pattern of month-to-month changes in a five-by-five transition matrix. The entries in this matrix are probabilities, indicating the proportion of households in each group that will remain in their group or shift to a different group in the following month.

At the national level, we have derived the transition matrix for each year 1998 through 2001 using data from food stamp quality control (QC) reviews conducted by all states on an annual sample of their active food stamp cases. The nationwide annual sample consists of more than 46,000 cases. For each state (and the District of Columbia), we have calculated the transition matrix from the state's pooled sample over the period 1998-2001. At both the national and state levels, the model was derived separately for households with and without earnings.

From the estimated parameters of the transition matrix, a series of error indicators has been computed nationally and by state, as follows:

- ***Total error rate***  
= case error rate among all active cases, indicating the percentage of cases that are ineligible, eligible but overpaid (by \$25 or more monthly), or eligible but underpaid (by \$25 or more monthly)
- ***First-month error rate***  
= case error rate among first-month (newly certified) active cases

- ***Next-month error rate: ongoing correct cases***  
= among ongoing cases not in error this month, the expected percentage in error next month
- ***Next-month error rate: ongoing error cases***  
= among ongoing cases in error this month, the expected percentage in error next month
- ***Next-month error rate: expiring correct cases***  
= among expiring cases not in error this month, the expected percentage in error next month
- ***Next-month error rate: expiring error cases***  
= among expiring cases in error this month, the expected percentage in error next month

The total error rate (also referred to as the combined case error rate, in reported QC statistics) is the most general indicator of the presence of error among active cases. This measure is computed nationally and by state, for each fiscal year; it is included in the annual error rate statistics published by the Food and Nutrition Service (FNS). The other indicators are not included in FNS' conventional error statistics and are components of the total error rate, as follows:

- The first-month error rate is a measure of payment accuracy at initial certification.
- The next-month error rates for ongoing cases indicate the effectiveness of interim actions at preventing errors (among ongoing correct cases) and at detecting and correcting errors (among ongoing error cases).
- The next-month error rates for expiring cases indicate the effectiveness of recertifications at preventing errors (among cases that are correct as they enter recertification) and at detecting and correcting errors (among cases that are in error as they enter recertification).

The total *case* error rate is very highly correlated with the total *dollar* error rate (or payment error rate, the summed dollar amount of overpayment and underpayment errors as a percentage of total payment dollars). In FY 2001, the pairwise correlation between the two measures was 0.923 for the fifty states and the District of Columbia. For this reason, there is little loss of generality in focusing here on the total case error rate, even though the total dollar error rate is the basis for determining fiscal liabilities and enhanced funding.

## **Findings: National Error Rate Trends**

The year-by-year national estimates of the component error rates provide a basis for explaining the downward trend in the national food stamp case error rate during 1998-2001. On a consistently measured basis, applying each year the same \$25 error threshold for eligible cases, the total case error rate declined nationally from 16.7 percent in 1998 to 12.8 percent in 2001.

The analysis conducted here indicates the factors contributing to the reduction in the national case error rate, separately for cases with earnings and for cases without earnings. For both caseload segments, one factor was a drop in the error rate at initial certification—i.e., the first-month error rate. This trend was accentuated by the fact that first-month cases came to comprise an increasing share of the caseload. Far more significant, however, was the improvement in the rate at which errors were prevented or corrected between formal case actions, through the interim action process. Also noteworthy was the drop in the next-month error rate for expiring error cases, as recertification procedures also appeared to improve in correcting errors.

## **Findings: State-by-State Error Patterns**

Historically, food stamp error rates have shown substantial variations among states. Based on the state-by-state estimates of the model, some states achieve low total case error rates through strong performance in all three phases of the administrative process: initial certification, interim action, and recertification. Three states are in the lowest quartile for their total case error rate and are below the median in all of the component error parameters: Arizona, Kentucky, and Wyoming. Other states have low overall rates and show strong performance on some but not all phases of certification, indicating the potential for further improvement. Minnesota and South Carolina, for instance, have comparatively low total error rates despite evidence that their recertification procedures are not as effective as most other states in preventing and correcting errors among expiring cases. In contrast, Oklahoma and Oregon do reasonably well in containing errors at interim action and recertification, but each has a very high error rate at initial certification.

## **Findings: Effects of More Frequent Recertification**

One can use the estimated model to test the long-term effects of alternative scenarios regarding the frequency of recertification. We define the “recertification rate” as the percentage of current-month active cases whose certification is about to expire and who are thus about to undergo recertification. The test conducted here examined an increase of 5 percentage points in the recertification rate for cases with earnings. Using 2000 as the base year, the recertification rate would be increased from 15.5 to 20.5 percent for earnings cases.

This corresponds approximately to a shortening of the average certification period from 6.5 months to 4.9 months.

Such a shift could either decrease or increase the case error rate, depending on whether or not the proportional reduction in error cases (the numerator of the case error rate) exceeds the proportional reduction in active cases (the denominator). Although in principle the effect on the “aggregate participation rate” (the percentage of households receiving food stamps) could also be either upward or downward, one expects a downward change. The reason is that a case termination is more likely when a case is subject to a recertification than in all other months (when the case is, by definition, subject to the interim action process). If recertifications occur more frequently and increase the rate of monthly case closure, this will expectedly lower the aggregate participation rate. Because of the possible sensitivity of estimates to the particular base year used for the calculations, separate estimates were computed using 2000 and 2001 as the base year.

For households with earnings, the alternative scenario involving more frequent recertification was found to result in a small long-term reduction in the number of error cases among households with earnings. The proportional reduction was estimated at 1.7 to 3.3 percent. The associated effect on the case error rate ranged from a small reduction of 0.20 percentage points to an increase of 0.76 percentage points. The latter finding implies that the effects of more frequent recertification on case closure may be proportionally larger for correct cases than for error cases.

The estimates obtained here for the effect of more frequent recertification on program participation among households with earnings is similar to that found in two recent econometric studies that used pooled cross-sectional time-series data at the state level.<sup>1</sup> In contrast, the effects estimated here on the error rate for earnings cases is less favorable than the error rate reductions found in the earlier research.

These preliminary findings suggest that more frequent recertification for cases with earnings may have effects that are more pronounced in reducing the rate of participation than in reducing the rate of error. As intended, shorter certification periods are shown to lead to higher closure rates for error cases than would otherwise occur through interim action. It also appears, however, that more frequent recertification leads to higher closure rates for correct cases, mitigating the intended reduction in the case error rate.

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<sup>1</sup> See Kabbani and Wilde (2003) and Kornfeld (2002).