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EVALUATING THE HUNGER PREVENTION ACT QUALITY CONTROL REFORMS

A REPORT TO CONGRESS

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A product of
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EXECUTIVE SUMMARY

This report examines the changes in the quality control (QC) system for the Food Stamp Program adopted in the Hunger Prevention Act of 1988 (P.L. 100-435, enacted September 19, 1988). The report responds to the congressional mandate in the Act to evaluate the effectiveness of the new "Payment Accuracy Improvement System" within three years of enactment. In addition, the report examines two long-standing QC policy concerns that re-emerged in congressional debate and that now take on new significance with the enacted reforms. One concern is whether current food stamp QC error rates appropriately account for the interaction in benefits between the Food Stamp Program and Aid to Families with Dependent Children (AFDC). Another concern is whether QC policies that focus on the reduction of overpayment error (issuances to ineligible cases and overissuances to eligible cases) tend to promote an increase in underpayment error (underissuances to eligible cases).

Effects of the Reforms

Title VI of the Hunger Prevention Act (HPA) made the following major policy changes:

- The Act raised the national error rate tolerances for determining fiscal liabilities and enhanced funding, with liabilities based on a combined payment error rate that includes underpayments as well as overpayments and with liabilities computed as a percentage of annual State issuances instead of annual federal reimbursement for administrative costs.
- The Act revised the procedures by which a State's liability may be reduced through determinations by the Secretary of Agriculture or through subsequent administrative or judicial review of a State's appeal.

Our principal findings pertain to the effect of the reforms on fiscal liabilities in Fiscal Years 1986 to 1990:

- The new provisions have substantially reduced the number of States annually subject to fiscal liabilities. Under the pre-HPA rules, between 38 and 44 States would have been subject to a liability in each year, based on a national tolerance level of 5 percent overpayment error. The HPA rules, redefining the national tolerance level in terms of combined

payment error (overpayment and underpayment) and resulting in a tolerance level of about 11 percent in these years, reduced the number of States potentially subject to liabilities to between 9 and 14.

- For each of these years, the corresponding reduction in the national amount of fiscal liabilities was in the range of \$110 million to \$150 million--roughly, from an annual level of \$175 million to \$200 million under the pre-HPA rules to an annual level of \$35 million to \$65 million under the HPA rules.

We also estimated the effect of the reforms on enhanced funding for Fiscal Years 1989 and 1990, the first effective years for the new incentive provisions:

- The reforms increased the number of States that received enhanced funding, by 4 in 1989 (from 3 to 7 States) and by 2 in 1990 (from 3 to 5 States).
- The corresponding increase in the national amount of enhanced funding was in the range of \$1 million to \$2 million--from an annual level of \$5 million to \$6 million (under the pre-HPA rules) to an annual level of \$6 million to \$7 million.

Insufficient time has elapsed to draw any conclusions about the effects of the new legislation on error rate trends. For most States the 1989-1990 error rates--either for overpayment error, underpayment error, or combined payment error--fall within or somewhat below the range established in the 1985-1988 period, during which the pre-HPA rules on fiscal liabilities and enhanced funding prevailed.

- Based on 1989 and 1990, the recent performance of States seems to represent no significant departure from the decade-long trend of general stability or modest decline in food stamp error rates.

As to the speed of resolution of State appeals, there is not yet any empirical basis on which to assess the reforms. In reviewing the historical record, we found that for FY 1981 and 1982 an average of three to four years was required (from the end of each review period) to reach a final determination on a State's liability. The following years saw a slowdown in the process of resolving claims, as the number of States initially notified of liabilities rose from 13

in 1983 to 48 in 1985. The 1989 congressional action waiving all AFDC sanctions through 1990, with the expectation of similar food stamp relief in the 1990 Farm Bill, may then have introduced further delays. Several more years must elapse before one can judge whether the newly enacted procedural reforms will enable a more prompt resolution of State appeals, compared to the historical experience.

Interaction of AFDC and Food Stamp Payment Errors

For over a decade there has been concern that the food stamp overpayment error rate exaggerates the net cost of payment errors to the federal government because of the relationship between program benefits in AFDC and food stamps. The central policy issue is whether, for food stamp cases receiving an incorrect AFDC payment, the food stamp QC finding should presume the actual AFDC payment (as under current rules) or the correct AFDC payment.

Prior research found some reduction in food stamp overpayment error rates after accounting for the interaction in benefits between the two programs. Correspondingly, the fiscal liabilities to States (as computed under the pre-HPA rules) were also reduced. We undertook a new analysis of this issue, for several reasons: the HPA provisions on fiscal liabilities now make it necessary to account for the effect of program interaction on underpayment errors, more recent QC data are now available, and it is now possible to use in the analysis both the AFDC and food stamp QC findings on cases receiving integrated reviews. In the new analysis, an "AFDC offset" was computed on a case-by-case basis. The AFDC offset is an adjustment to the food stamp QC finding to reflect the use of the correct (versus actual) AFDC payment.

Our findings are based on FY 1988 data from twenty-four States that integrate their QC reviews for AFDC and food stamps:

- For 23 of the 24 States analyzed, the AFDC offset reduced the overpayment error rate, by 0.1 to 1.1 percentage points, with a drop of 0.4 percentage points at the 24-State overpayment error rate. This drop in the overpayment error rate is consistent with, although somewhat lower than, the findings of the earlier research.

- In contrast, for 22 of the 24 States, the AFDC offset increased the underpayment error rate, by 0.1 to 2.1 percentage points, with a rise of 0.6 percentage points in the 24-State underpayment error rate.
- As a net result, for 15 of the 24 States, the AFDC offset increased the combined payment error rate, by 0.1 to 1.2 percentage points, with an overall net rise of 0.2 percentage points in the 24-State combined payment error rate.
- This pattern of error rate changes occurs because, among cases for which the AFDC offset causes a shift in case error status, one-half of these result in a food stamp underpayment for a case that was previously considered correct.

The estimated rise in the combined payment error rate is the striking result. Because the AFDC offset often creates new food stamp underpayment errors, the combined payment error rate rises even though the overpayment error rate drops.

We also examined the effect on fiscal liabilities of applying an AFDC offset, maintaining the general framework for liabilities now established by the Hunger Prevention Act. For these calculations, we treated the 24 States as if they constituted the nation, basing the payment error tolerance level on the (weighted average) combined payment error rate for the 24 States.

- Although fewer States would become subject to liabilities if an AFDC offset were applied, several States would become subject to much larger liabilities than under current policy. The result is a substantial increase in the estimated total amount of liabilities summed across all 24 States.

These latter estimates are very sensitive to the particular grouping of States included in the analysis and must be interpreted with caution. For instance, if one excludes California from the analysis, the AFDC offset causes an appreciable drop in total liabilities, rather than a substantial increase. This reinforces the more general finding that an AFDC offset would have differing implications among States, depending on the particular pattern of AFDC and food stamp errors.

Relationship Between Food Stamp Overpayment and Underpayment

Under the QC policies that prevailed throughout most of the 1980s, until passage of the Hunger Prevention Act, States were subject to fiscal liabilities for exceeding a tolerance level of overpayment error, with no corresponding adverse consequences for underpayment error (nor for incorrect denials and terminations). This differential treatment of errors raised the concern that States, in seeking to control overpayments and thereby avoid liabilities, might divert their attention from underpayments and allow such errors to rise. Our analysis here used food stamp error rates by State from 1980 through 1990 to examine whether this concern has any empirical basis. Our findings are based on a measure of underpayments that includes underissuances to eligible cases, but does not include incorrect denials or terminations.

- The 1980-1990 experience of States indicates that reducing overpayment errors has not led to more underpayment errors. To the contrary, the evidence suggests that lower overpayments are associated with lower underpayments. We found this empirical relationship when examining either the cross-sectional variation in error among States or--more pertinently--the year-to-year variation for individual States. We also found no evidence to indicate that the passage of the Hunger Prevention Act has resulted in any shift in the pattern of overpayment and underpayment errors.

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CHAPTER I

INTRODUCTION

The Hunger Prevention Act of 1988 (P.L. 100-435) instituted a series of major reforms to the quality control (QC) system in the Food Stamp Program. As enacted on September 19, 1988, the legislation had the following objectives:

- to balance the treatment of different error types, basing fiscal liabilities on a measure that combines underpayments with overpayments;
- to ease the financial consequences to States of their errors, setting national tolerance levels so that fewer States become subject to fiscal liabilities and more States can qualify for enhanced funding; and
- to improve the process of collecting fiscal liabilities, expediting the resolution of State appeals while protecting the due-process rights of States.

Under Section 604, the "Payment Accuracy Improvement System," Congress directed the Secretary of Agriculture to undertake:

An evaluation of the effectiveness of the system of program improvement initiated under this section that shall be reported to the Congress along with the Secretary's recommendations no later than 3 years from the date of enactment.

This report responds to the congressional mandate for an evaluation of the new QC policies.

A. STATUTORY PROVISIONS

The QC provisions of the Hunger Prevention Act (HPA) pertain to four issues: financial incentives, variance exclusions, secretarial waiver authority, and administrative and judicial review.

Financial Incentives

The Act altered the rules for determining fiscal liabilities, retroactive to FY 1986, as follows:

- States are subject to liability based on their rate of combined payment error (overpayment and underpayment error), rather than the overpayment error rate only.
- The national tolerance level for combined payment error reflects the historical experience of all States, rather than a fixed national value.

- The fiscal base for computing a State's liability is the State's total annual issuances, rather than the federal reimbursement amount for administrative costs.
- The liability amount is directly proportional to the difference between the State's combined payment error rate and the national tolerance level, rather than a percentage that rises in abrupt steps as the State's overpayment error rate increases.

The Act also changed policy with respect to the interest on claims against State agencies, effective for claims established for error rates beginning with FY 1986, as follows:

- Interest on any portion of a claim unpaid within 30 days begins to accrue on the date that the State receives the bill for collection, unless the State appeals. If the State appeals, interest on any unpaid portion of a claim accrues from the date of the final administrative appeal decision, or two years after receipt of the bill for collection, whichever comes first. Any claim that is paid by a State and then reversed on appeal will be returned to the State with interest, accruing from the date the payment was received. No interest is assessed while a claim is awaiting Secretarial decision on a good-cause waiver request.
- The applicable interest rate is the weekly auction rate for 90-day Treasury bills, averaged over the period of interest accrual.

Prior policy included no such provisions, either for federal collection of interest from States on unpaid claims or federal payment of interest to States on claims paid but subsequently overturned.

For FY 1989 and beyond, the Act altered policy with respect to enhanced funding for low-error States, as follows:

- Under the revised formula, enhanced funding equals a percentage of State administrative costs normally reimbursable at 50 percent—one percentage point for each full 0.1 percent by which the State's combined payment error rate falls below 6 percent, for States whose negative case error rate is less than the previous year's national weighted mean negative case error rate.
- Enhanced funding is capped at 10 percent of State administrative costs normally reimbursable at 50 percent.

Prior policy had set enhanced funding at a fixed 10 percent of the State administrative costs normally reimbursable at 50 percent, for States whose sum of overpayment and underpayment error was less than 5 percent, and whose negative case error rate was below the prior year's national weighted mean.¹

Variance Exclusions

The Act excludes the following errors from the combined payment error rate:

- Errors occurring within a grace period following the implementation date of new regulations--i.e., errors associated with the State's application of new regulations promulgated during the first 60 days (or 90 days, at the Secretary's discretion) from the required implementation date for such regulations; and
- Errors attributable to incorrect federal information--i.e., errors that result when a State properly processes incorrect case information provided by federal agencies or when a State acts on incorrect policy information approved or disseminated in writing by the Secretary or a designee.

These provisions are effective for FY 1989.

Secretarial Waiver Authority

The Act gives the Secretary authority to waive some or all of any claim established against a State for failure to meet its error rate goal, retroactive to FY 1986, as follows:

- The Secretary has the sole authority to decide whether there was good cause (an unusual event with a large, uncontrollable impact on error rates) for the State's failure to meet the error rate tolerance; States may not seek administrative or judicial appeal on any such decision by the Secretary.
- The Secretary, in determining whether to settle, adjust, or waive a State claim, shall consider a State agency's plans for "new dollar investment in activities to improve program administration in order to reduce payment error."

¹For clarification, note that enhanced funding (under either the HPA rules or prior policy) is a percentage of the State's administrative cost base subject to 50 percent federal reimbursement. In contrast, the pre-HPA policy computed fiscal liabilities as a percentage of the federal reimbursement amount for such administrative costs (an amount equal to 50 percent of the cost base).

Administrative and Judicial Review

The Act established new procedures for administrative and judicial review of any claims that the Secretary does not waive. A State may appeal a claim after it is formally billed. The revised procedure for administrative review is as follows:

- The appeal will be considered through a department hearing, in accordance with Sections 556 and 557 of Title 5 of the United States Code ("Administrative Procedures Act").
- One or more administrative law judges (ALJs) will preside over the taking of evidence, with the authority to issue and enforce subpoenas and to appoint expert witnesses.
- A determination made by an ALJ will be final, subject to judicial review, and will take effect thirty days after the date (of delivery or service of final notice) of such determination.

A State is entitled to judicial review of any established claim, as follows:

- This appeal takes place in federal court after the ALJ determination.
- This is a review of the administrative record established by the ALJ, not a trial *de novo* (as under current procedure).

For both administrative and judicial review, the new provisions apply retroactively to claims for FY 1986.

Current Status of Regulations Implementing the OC Reforms

The Department is moving to final rulemaking in implementing the statutory reforms. These rules are at various stages, as summarized in Exhibit I.1.

The regulation on "miscellaneous provisions" pertains to the financial incentives for error reduction and resolution of State appeals--i.e., fiscal liabilities, enhanced funding, and interest on claims. The regulation on "variance exclusions" implements the corresponding statutory language noted above. The separate regulations on "good-cause determination" and "new dollar investments" pertain to those particular matters of Secretarial waiver authority. Finally, the forthcoming regulation on "rules of procedure" will implement the statutory provisions on administrative review, especially with regard to the role of administrative law judges.

Exhibit I.1

**Status of Regulations Implementing the
QC Reforms of the Hunger Prevention Act**

Subject	Status of Rule
Miscellaneous provisions	Proposed rule published January 31, 1991
Variance exclusions	Final rule published November 23, 1990
Good-cause determination	Proposed rule published January 16, 1991
New dollar investments	Proposed rule published November 27, 1990
Rules of procedure (ALJs)	Not published

B. ORGANIZATION OF THE REPORT

Chapter II of this report examines the effects of the Hunger Prevention Act on fiscal liabilities and enhanced funding, error rate trends, and the speed of resolution of State appeals.

The report then examines an issue that arose in the congressional debate on the Hunger Prevention Act, but on which the Congress ultimately took no action. This is whether, for food stamp cases receiving an incorrect payment under the Aid to Families with Dependent Children (AFDC) program, the food stamp QC finding should presume the actual AFDC payment (as under current QC rules) or the correct AFDC payment. Chapter III addresses this issue using data from the Fiscal Year 1988 national QC samples for both food stamps and AFDC.

A long-standing concern in food stamp QC policy has been whether State efforts to reduce overpayments may promote an increase in underpayments. The issue now takes on new meaning, because the Hunger Prevention Act has broadened the basis of fiscal liabilities to include both overpayments and underpayments. Chapter IV updates earlier analyses on this subject, using data for 1980 through 1990 to test the interrelationship between the two forms of error.

Throughout this report, "overpayment error" refers to issuances to ineligible active cases and overissuances to eligible active cases, "underpayment error" refers to underissuances to eligible active cases, and "combined payment error" refers to the combination of overpayment error and underpayment error. All annual estimates pertain to federal fiscal years.

CHAPTER II

EFFECTS OF THE REFORMS

This chapter examines the effects of the Hunger Prevention Act (HPA) in three areas: fiscal liabilities and enhanced funding, error rate trends, and speed of resolution of State appeals.

As to the effect of the reforms on fiscal liabilities, the estimates are straightforward for the 1986-1988 retroactive period, during which error rates were obviously unaffected by the reforms. When compared to the pre-HPA rules, the HPA provisions reduced the number of States subject to fiscal liabilities by 30 to 34 States in each year—i.e., from 44 to 14 States in 1986, from 42 to 10 States in 1987, and from 43 to 9 States in 1988. A similar drop was estimated for 1989 (from 42 to 9 States) and for 1990 (from 38 to 12 States). For all of these years, the corresponding reduction in the national amount of liabilities was in the range of \$110 million to \$150 million—from a level of \$175 million to \$200 million under the pre-HPA rules to between \$35 million and \$65 million under the HPA rules.

We also estimated the impact of the HPA rules on enhanced funding for 1989 and 1990, the first two effective years for the incentive provisions. The reforms increased the number of States eligible for enhanced funding by 4 in 1989 (from 3 to 7 States) and by 2 in 1990 (from 3 to 5 States). The corresponding rise in the annual amount of enhanced funding was in the range of \$1 million to \$2 million.

There is insufficient evidence to draw any conclusions about the effects of the new legislation on error rate trends. Rather, we have simply characterized the general patterns in error rate movements since 1985, treating the period 1985-1988 as reflecting the pre-HPA policy rules and 1989-1990 as the period reflecting the HPA reforms. It appears that for most States the 1989-1990 error rates—either for overpayment error, underpayment error, or combined payment error—fall within or somewhat below the range established during 1985-1988. The overall performance of States since the enactment of HPA seems to represent no significant departure from the established trend of general stability or modest decline in food stamp error rates.

On the speed of resolution of State appeals, we also have insufficient information to assess the reforms. The relevant provisions affecting Secretarial determinations, administrative review, and judicial review have not yet been implemented in final regulations. In our review of claims for 1981 and 1982, we found that an average of three to four years was required (from the end of a review period) to reach final determination of a State's liability. The evidence for 1983-1985 indicated a further slowdown in

the process of notifying States and resolving claims. The HPA reforms are intended to speed action at the Secretarial, administrative, and judicial levels of review. It will be several years before sufficient experience is gained under the new procedures to evaluate their effectiveness in expediting the resolution of State appeals.

A. FISCAL LIABILITIES AND ENHANCED FUNDING

Fiscal Liabilities

Under the pre-HPA rules, a State was subject to a fiscal liability if its annual overpayment error rate exceeded 5.00 percent. The amount of the fiscal liability depended on the excess percentage of overpayment error (above 5.00) and on State administrative costs reimbursable federally at 50 percent. As noted in Chapter I, the HPA rules use the State's combined payment error rate (for overpayment and underpayment error) rather than the overpayment error rate only. The national tolerance level for combined payment error will now reflect the historical performance of all States as opposed to a fixed national value. The new base for the fiscal liability is the State's total annual issuances, rather than the federal reimbursement amount for administrative costs. Finally, the fiscal liability amount is directly proportional to the difference between the State's combined payment error rate and the tolerance level, versus a percentage that rises in abrupt steps as the State's overpayment error rate increases.

For 1986 through 1990, Exhibit II.1 compares the pattern of fiscal liabilities under the pre-HPA and HPA rules. To provide further historical perspective, the exhibit also includes the pre-HPA figures for 1985. The effect of the HPA rules is to remove liabilities entirely from at least two-thirds of those States that would otherwise have faced claims in 1986-1990. For each year during the 1986-1990 period, the pre-HPA rules would have subjected between 38 and 44 States to a liability. The HPA rules reduced this annual number to between 9 and 14.

The Act has caused a similar proportional reduction in the annual national amount of fiscal liabilities, as also shown in Exhibit II.1. The pre-HPA rules would have resulted in \$175 million to \$200 million in annual liabilities during 1986-1990. The HPA provisions served to reduce this amount by about two-thirds or more, to between \$35 million and \$65 million annually.¹

¹Note that under pre-HPA rules the total amount of the fiscal liabilities would have remained nearly constant since 1987. Under the HPA rules, however, the total decreased somewhat from 1987 to 1988 and then increased substantially to 1990. A detailed comparison reveals the dominant role of New York State, which accounted for \$13.1 million of the \$42.5 million total in 1987 and \$17.5 million of the \$35.7 million total in 1988, but then fully \$41.3 million of the \$56.5 million total in 1989 and \$33.4 million of the \$64.7 million total in 1990.

Exhibit II.1

**Fiscal Liabilities under pre-HPA Rules
and HPA Rules, Fiscal Years 1985-1990**

Fiscal Year	Number of States			Amount (\$ millions)			Payment Error Tolerance Level (%)	
	Pre-HPA	HPA	Change	Pre-HPA	HPA	Change	Pre-HPA ^b	HPA ^c
1985	48	a	a	196.2	a	a	5.00	a
1986	44	14	-30	201.6	45.8	-155.7	5.00	11.39
1987	42	10	-32	178.8	42.5	-136.2	5.00	11.27
1988	43	9	-34	177.2	35.7	-141.5	5.00	10.97
1989	42	9	-33	178.3	56.5	-121.9	5.00	10.80
1990	38	12	-26	177.6	64.7	-112.9	5.00	10.80

Notes: a. Not applicable.

b. For the overpayment error rate.

c. For the combined payment error rate.

Enhanced Funding

Under the pre-HPA rules a State was eligible for enhanced funding if the sum of its overpayment and underpayment error rates for active cases was less than 5 percent and if its negative case error rate was less than the national weighted average for the previous fiscal year. A qualifying State received 60 percent federal reimbursement for its administrative costs normally reimbursed at 50 percent. Thus its enhanced funding under the pre-HPA rules was equal to 10 percent of those administrative costs.

Starting with 1989, the Hunger Prevention Act raised the threshold for active case error at which a State becomes eligible for enhanced funding, and it introduced a variable rate of enhanced funding: one percentage point for each full 0.1 percent by which the State's combined payment error rate falls below 6 percent (up to a maximum of 10 percentage points). The net effect of the change was to make enhanced funding newly available, but at a graduated rate, to States with combined payment error rates between 5.00 and 5.90 percent. A State with a combined payment error rate of 5 percent or less remains unaffected by the new rules.

Exhibit II.2 shows the number of States that received enhanced funding under pre-HPA rules for 1985 through 1988, the number that would have received funding under the pre-HPA rules for 1989 and 1990, and the number that have received enhanced funding under the HPA rules for 1989 and 1990. Also, the right-hand columns give the corresponding total amounts of enhanced funding. Under the pre-HPA rules, the number of States varied only between two and four from 1985 to 1988. Three would have qualified in 1989 and 1990. The more generous HPA rules made enhanced funding available to four additional States for 1989 and two additional States for 1990.

From 1985 to 1988, the total amount of enhanced funding under the pre-HPA rules remained in the range of \$1 million to \$2 million. Even with no change in policy, this annual total would have risen to the range of \$5 million to \$6 million in the following years.¹ The HPA rules have somewhat accentuated this upward trend in incentive payments, boosting the national total by \$1.7 million in 1989 and \$0.9 million in 1990.

¹The explanation lies in the fact that Kentucky, whose combined payment error rate moved below 5 percent in 1989 and remained there in 1990, has a level of administrative costs roughly ten times as large as each of the States that had received enhanced funding between 1985 and 1988 (Hawaii, Nevada, North Dakota, and South Dakota). When States with larger administrative costs achieve low enough payment error rates, the total amount of enhanced funding may rise substantially.

Exhibit II.2

**Enhanced Funding under pre-HPA Rules and
HPA Rules, Fiscal Years 1985-1990**

Fiscal Year	Number of States			Amount (\$ millions)		
	Pre-HPA	HPA	Change	Pre-HPA	HPA	Change
1985	3	a	a	1.1	a	a
1986	3	a	a	1.2	a	a
1987	4	a	a	2.2	a	a
1988	2	a	a	1.0	a	a
1989	3	7	+4	5.0	6.7	+1.7
1990	3	5	+2	6.0	6.9	+0.9

Note: a. Not applicable.

B. ERROR RATE TRENDS

Because the Hunger Prevention Act was enacted near the end of Fiscal Year 1988, only for 1989 and 1990 would the available QC data reflect any influence of the Act on State error rate performance. Attributing any apparent trend in 1989 and 1990 to the Act would be speculative, for several reasons. First, the policy changes and administrative actions undertaken by States in response to the new legislation required time to develop and implement. Then, depending on the nature of the changes, the associated effect on error rates occurred with some lag—for example, with changes in case recertification, only after a substantial number of active cases had moved through the new procedures.

Second, error rates can be affected by many other factors, including:

- changes in Food Stamp Program caseloads;
- financial resources available to State and local Food Stamp Program operations;
- changes in Food Stamp Program rules;
- changes in other major public assistance programs, such as AFDC, General Assistance, Supplemental Security Income, and Medicaid;
- commitment to error reduction; and
- the possibility of liability waivers.

There is no satisfactory approach for separating these influences from those specific to the QC rules adopted in the Hunger Prevention Act.

Finally, one must bear in mind that State error rates are sample-determined estimates that contain some known degree of statistical imprecision. The observed change in a State's annual error rate, for example, may lie within an expected range of sampling fluctuation and thus not reflect any meaningful shift in payment accuracy. Our analysis of the changes in State overpayment error rates from 1988 to 1989 and from 1989 to 1990 indicates that more than three-quarters of the measured year-to-year changes were not statistically significant (i.e., were not significantly different from zero).

Given the many determinants of error rates and the limitations of the available data, we are able to present the error rate trends but cannot infer anything specific about the role of the QC reforms. In reporting the recent trends, we distinguish the 1985-1988 period from the 1989-1990 period. During the earlier four-year interval, States operated their programs under an announced federal policy that based liabilities on a 5 percent national tolerance level for overpayment error. During the latter two years,

those first potentially affected by the Act, liabilities were based on a 10.80 percent national tolerance level for combined payment error, statutorily defined as 1 percent above the lowest historically attained national average for the combined payment error rate (9.80 percent for each of these two years).

Exhibit II.3 shows the national trends in overpayment, underpayment, and combined payment error. The annual averages show the declining trend in combined payment error, from 10.48 percent in 1985 to 9.80 percent in 1990. In general, the downward national trend reflected year-to-year declines in the overpayment error rate, partly offset by some upward movement in the underpayment error rate. Not surprisingly, the comparison of the 1985-1988 and 1989-1990 averages shows a marked drop in the overpayment error rate (from 7.84 to 7.31 percent) and a slight rise in the underpayment error rate (from 2.42 to 2.50 percent). The 1990 error rates, however, seem to suggest some countermovement on both measures.

For the reasons noted earlier, this evidence has no clear interpretation regarding the impact of the QC reforms. It is too early to attempt any analysis that might distinguish among the different factors noted above. To the extent that one can draw any conclusions, it appears that the measured performance of States since the passage of the Hunger Prevention Act represents no discernible departure from the previously established trend of modest decline or general stability in food stamp error rates.

C. SPEED OF RESOLUTION OF STATE APPEALS

The Hunger Prevention Act revised not only the rules that determine fiscal liabilities, but also the procedures for implementing such claims. The Act addressed the basis on which the Secretary of Agriculture may reduce or waive any announced liability, and it modified the procedures for administrative and judicial review under which a State may challenge an adverse Secretarial decision. The new statutory provisions reflected congressional desires to expedite the resolution of claims while still protecting the due process rights of States.

It is not yet possible to fully evaluate the effect of these provisions on the speed of resolving State appeals. As noted in Chapter I, the regulations implementing the new procedures have not yet been published as final rules. However, even if final regulations were in place, insufficient time would have elapsed to observe the administrative and judicial outcomes for States subject to liabilities. Inherently, the process of resolving claims is time-consuming, given the materials that must be prepared in conjunction with Secretarial decisions, State appeals, administrative judgments, judicial cases, and out-of-court agreements. Instead, our approach here is to examine the speed of resolution of appeals under the pre-reform procedures and then to indicate how the new procedures are intended to expedite the resolution of appeals.

Exhibit II.3

National Error Rates for Overpayment, Underpayment, and Combined Payment Error, Fiscal Years 1985-1990

	Overpayment error rate	Underpayment error rate	Combined payment error rate ^a
Percentage of total allotments			
<u>Annual averages</u>			
1985	8.27	2.24	10.48
1986	8.09	2.27	10.39
1987	7.58	2.63	10.25
1988	7.41	2.53	9.94
1989	7.27	2.54	9.80
1990	7.34	2.46	9.80
<u>Multi-year averages</u>			
1985-1988	7.84	2.42	10.27
1989-1990	7.31	2.50	9.80

Source: U.S. Department of Agriculture, Food and Nutrition Service, Quality Control Annual Report: Food Stamp Program, annual.

Note: a. The computational formula for the combined payment error rate often does not yield the sum of the overpayment error rate and the underpayment error rate.

Pre-Reform Procedures

One can describe the pre-reform process for implementing fiscal liabilities in the following four stages, as they prevailed for 1981 through 1985:

- Initial notification-- Following the end of the review period, State and federal QC review findings are finalized, official error rates computed, liability amounts determined, and the affected States notified.
- Secretarial decision--The Secretary decides either--
 - to withdraw or reduce a liability (for instance, because of revisions to a State's official error rate resulting from delayed arbitration of disputed QC findings), or
 - to waive (upon State request) some or all of a State's claim, based on good faith efforts to reduce its error rate, good cause for being unable to do so, or a corrective action plan.

This stage is completed with the issuance of billings to those States whose liabilities are not withdrawn or fully waived by the Secretary.

- Administrative review-- States can appeal an adverse Secretarial decision to the State Food Stamp Appeals Board, which can waive some or all of the outstanding claim.
- Judicial review/settlement--States can continue to challenge the federal claim through *de novo* adjudication in federal court, leading typically to an out-of-court settlement and a multi-year schedule for collection of the agreed-upon amount.

For 1983 through 1985, the normal process was superseded by the provisions of the 1990 Farm Bill. In this legislation Congress waived all unpaid claims for the three annual review periods and, in several cases, refunded federal collections.

In terms of aggregate annual dollar amounts, Exhibit II.4 traces the progression of liabilities through the various stages identified above, for 1981 through 1985. (During 1981 and 1982, liabilities were assessed for semiannual review periods. We have constructed annual totals for these two years in order to facilitate comparisons with the later years.)

In each of the first three years shown in Exhibit II.4, the combination of Secretarial decisions, administrative review, and judicial review served to reduce State liabilities to an annual "Amount due" of between \$1 million and \$3 million. The largest reductions each year occurred through Secretarial decision. Either through withdrawal or waivers, Secretarial action eliminated 50 to 70 percent of the initial liability amount. (For the first semiannual review period in 1981, the Department of Agriculture waived all announced liabilities after the affected States submitted special corrective action plans.) Typically, the process of administrative review then served to waive 40 to 60 percent of the remaining

Exhibit II.4

Status of Quality Control Liabilities, Fiscal Years 1981-1985

	1981	1982	1983	1984	1985
In thousands of dollars					
Initial notification	28,965	15,885	12,628	81,350	201,169*
<u>Reductions via:</u>					
Secretarial decision					
Withdrawal ^b	0	1,347	4,746	2,478	4,926
Waiver	20,334	7,618	799	6,101	0
Administrative review	4,908	2,603	3,488	0	0
Judicial review/ settlement ^c	2,268	1,419	672	0	0
	0	0	1,866	72,213	195,943
Congressional action					
	27,510	12,987	11,571	80,792	200,869
Total reductions					
Amount due	1,455	2,898	1,058	559	299
- Collections	1,455	1,575	1,058	559	299
= Balance due	0	1,324	0	0	0

- Note:
- a. This exceeds the total shown in Exhibit II.1 by the amount of Secretarial withdrawals (shown in the next line of this exhibit).
 - b. Withdrawals resulted largely from late revisions to the official error rates in the States receiving an initial notification.
 - c. All amounts shown correspond to out-of-court settlements; no court decisions were ever made.

liability amount billed to States. Judicial settlements declined each year, both in absolute dollar amount and as a percentage of the liability amounts that States brought to court. This decline resulted most importantly from the 1990 Farm Bill and its forgiveness provisions, which halted all pending judicial actions and out-of-court negotiations on 1983 claims. For that year, the 1990 Farm Bill cancelled \$0.9 million in unsettled or uncollected liabilities and refunded another \$1.0 million in collections previously paid. Collections were received from States for all other amounts due, with the exception of a \$1.3 million amount in Massachusetts for 1982 that remains pending in court.

The situation for 1984 and 1985 was dominated by the congressional action taken in the 1990 Farm Bill. In contrast to the prior three years, Secretarial decisions reduced the announced liabilities by only 10 percent or less. The impact of the Farm Bill, in forgiving States for all remaining amounts due, was to reduce liabilities by \$72.2 million in 1984 and \$195.9 million in 1985.

With these dollar figures as background, we now examine the time required to resolve the federal claims. For this purpose, we have computed the average number of months required at each of the four stages identified above. These averages are computed on the basis of the number of States whose liabilities were actually under consideration at the given stage, thus excluding any whose claim was previously resolved. An overall average is also computed, based on all States receiving initial notification of a liability.

Exhibit II.5 shows the estimates for the 1981-1985 review periods. For the four semiannual periods in 1981 and 1982, initial notifications occurred between 10 and 17 months following the end of the corresponding period. Secretarial decisions—from initial notification to either Secretarial waiver or agency billing—were about three years in process for the 1981-1 liabilities, but were much speedier (8 to 20 months) for the following three semiannual periods. The administrative review stage—from agency billing to the decision of the State Food Stamp Appeals Board (SFSAB)—consumed typically 8 to 12 months for the States involved. The subsequent judicial review/settlement phase was a very lengthy process for those States that brought suit, requiring in some instances more than four years from the time of the SFSAB decision to the settlement, with an average of about three years. For these four semiannual review periods, the overall elapsed time from the end of the review period to the final resolution of a State's liability (excluding the time required for the collections themselves) averaged between three and four years.

The situation for the following years, 1983 to 1985, is more difficult to characterize. However, to the extent that any trend emerged, the pace of action in announcing liabilities and resolving claims appeared to slow somewhat. Initial notifications occurred 18 to 19 months after the end of the review period, versus 14 to 17 months for 1982. Secretarial decisions required an average of 22 months in 1983

Exhibit II.5

**Time Required for Resolution of Fiscal Liabilities,
Fiscal Years 1981-1985**

	Review period						
	1981-1	1981-2	1982-1	1982-2	1983	1984	1985
Number of States involved							
Initial notification	14	12	12	9	13	36	48
Secretarial decision	14	12	12	9	9	36	f
Administrative review	--	6	4	2	5	f	f
Judicial review/settlement	--	3	4	--	f	f	f
Overall	14	12	12	9	13	36	48
Average time required, in months							
Initial notification ^a	10.0	14.0	17.0	14.0	18.2	18.0	19.0
Secretarial decision ^b	34.9	7.5	15.5	20.1	21.8	35.0	f
Administrative review ^c	---	8.8	10.8	10.5	21.6	f	f
Judicial review/settlement ^d	---	40.7	34.3	---	f	f	f
Overall ^e	44.9	36.1	47.5	36.4	f	f	f

- Notes:
- a. From end of the review period to initial notification.
 - b. From initial notification to Secretarial waiver or agency billing.
 - c. From agency billing to decision of the State Food Stamp Appeals Board (SFSAB).
 - d. From SFSAB decision to settlement.
 - e. From end of review period to final outcome.
 - f. Normal process interrupted at this stage by 1990 Farm Bill.

and 35 months in 1984, versus 15 to 20 months for 1982. For administrative review, the average time doubled to 22 months in 1983, versus 11 months in 1982. Because the 1990 Farm Bill then halted all pending action by forgiving the claims for 1983 to 1985, no other time comparisons with previous years are possible.

Several developments may account for the slowed pace of action in announcing liabilities and resolving claims. As the national error rate tolerances became more stringent over time and more States became subject to liability (from 13 notified States in 1983 to 48 in 1985), federal QC staff resources became more strained. Also, as the dollar liabilities began to mount, and as the financial stakes rose for both the State and federal agencies involved, the process of preparing and reviewing materials and rendering judgments became more burdensome. Finally, the 1989 congressional action waiving all AFDC sanctions through 1990, with the expectation of similar food stamp relief in the 1990 Farm Bill, may have encouraged States to prolong litigation and avoid settlement. These various changes introduced complications and delay into Secretarial decision-making and administrative review.

Revised Procedures

Congress incorporated the following changes in the Hunger Prevention Act, to streamline and expedite the resolution of claims:

- Good cause relief—The Secretary retains the authority to waive some or all of a State's share of the cost of error where the Secretary determines the State had good cause for exceeding the liability threshold. However, the Secretary's decision on good cause relief is final and shall not be subject to review during the administrative or judicial review process. This represents a departure from the previous appeals process, in which the Secretary's good cause decisions were subject to further appeal. Moving good cause decisions from further appeal is intended to expedite higher level appeal decisions.
- Judicial review—States retain authority to seek judicial review of administrative decisions on claims. However, the judicial review shall be a review on the administrative record, not a trial *de novo*. Under the previous process, judicial appeals were conducted as *de novo* trials. Making judicial appeals a review of the administrative record is intended to streamline the judicial process.
- Interest provisions—The Hunger Prevention Act explicitly provides for the accrual of interest on any outstanding liabilities. Under the previous system, the authority to charge interest was never made explicit. The interest provisions are designed to encourage both the federal government and State agencies to move as quickly as possible with all aspects of the appeals process, and thus avoid paying interest.

These changes are thus intended to speed the resolution of claims through more prompt action at each level of review—Secretarial, administrative, and judicial. At present we have no empirical evidence on whether the new procedures have had their intended effects. Several more years must elapse before one can judge whether these reforms will enable a more prompt resolution of State appeals, compared to the historical experience.

CHAPTER III

INTERACTION OF AFDC AND FOOD STAMP PAYMENT ERRORS

For over a decade, there has been concern that the overpayment error rates estimated for food stamps and Aid to Families with Dependent Children (AFDC) together exaggerate the magnitude of total overpayments across the two programs. In particular, some contend that food stamp overpayment errors constitute in part a doubled-counting of misspent government funds. To the extent that States are subject to both food stamp fiscal liabilities and AFDC fiscal disallowances, the alleged double counting creates a double jeopardy situation for States and leads to overstated fiscal sanctions.

In this chapter we present estimates for selected States of the impact on the food stamp overpayment error rate and combined payment error rate of using the correct (versus actual) AFDC payment as the basis for the food stamp QC finding. The analysis uses State-reported QC data for 1988 and includes 24 States that integrate their AFDC and food stamp QC reviews. Recomputing error rates after applying an offset to reflect the correct AFDC payment, we find that the food stamp overpayment error rate would decrease in 23 of the 24 States. The reduction ranges from 0.1 to 1.1 percentage points, with a drop of 0.4 percentage points in the weighted-average overpayment error rate for all 24 States, from 6.8 to 6.4 percent.

However, in many food stamp cases the effect of the AFDC offset is to create an underpayment where no error previously existed (or, less frequently, where the case was previously overpaid). Because the estimated effect on a State's underpayments typically exceeds the effect on its overpayments, we find that the food stamp combined payment error rate would increase in 15 of the 24 States, by amounts ranging from 0.1 to 1.2 percentage points. The weighted-average combined payment error rate for all 24 States would rise by 0.2 percentage points, from 9.0 to 9.2 percent.

Finally, we examined the effect on fiscal liabilities of applying an AFDC offset, maintaining the general framework for liabilities now established by the Hunger Prevention Act. We estimate that, although fewer States would become subject to liabilities if an offset were applied, several States would become subject to much larger liabilities than under current policy. The result is a substantial increase in the estimated total amount of liabilities for all 24 States. However, these latter estimates appear quite sensitive to the particular grouping of States included in the analysis. This reinforces the more general finding that an AFDC offset would have differing implications among States, depending on the particular pattern of AFDC and food stamp errors.

This issue has its roots in the interaction between program benefits in AFDC and food stamps. Specifically, the food stamp benefit calculation regards an AFDC payment as countable income. As with other countable income (once allowable deductions are exceeded), the AFDC payment reduces the household's food stamp allotment by 30 cents per dollar of AFDC payment. The question for food stamp QC policy is whether, in situations where the food stamp household is receiving an incorrect AFDC payment, the food stamp QC finding should presume the actual AFDC payment (i.e., the incorrect AFDC payment, as under current QC rules) or the correct AFDC payment. Depending on whether the AFDC error is an overpayment or an underpayment, any corresponding "AFDC offset" to the food stamp QC finding in the case (to reflect its correct AFDC payment) might affect food stamp errors in a number of ways. For food stamp cases now considered correctly paid, the AFDC offset could result in an overpayment, an underpayment, or no change. For food stamp cases now considered in error (either overpaid or underpaid), the AFDC offset could increase or decrease the error amount, reverse the direction of the error (from overpayment to underpayment or vice versa), eliminate the error entirely, or leave it unaffected.

Depending on one's focus, a change in food stamp QC policy to adopt an AFDC offset has different implications. The focus here is the potential effect on States through a shift in measured food stamp error rates and corresponding fiscal liabilities. A second possible focus is whether an AFDC offset would yield food stamp error rates that properly indicate the budgetary cost to the federal government of payment errors. A third focus is that of food stamp clients, for whom QC review findings are sometimes the basis for State agency efforts to recoup overpayments or restore underpayments. A fourth focus involves the operational requirements for State and federal QC systems. For instance, States that do not currently integrate their AFDC and food stamp QC systems (about one-half of all States) would seemingly need to revise their procedures for sample selection or case review. Yet another focus is food stamp certification policy. If an AFDC offset is adopted as QC policy, certification procedures would most likely follow suit, as certification policy and QC policy generally conform to each other.¹

¹Under current procedures, if a food stamp eligibility worker discovers that a household's AFDC grant is incorrect, the worker nonetheless computes the food stamp allotment using the actual AFDC grant. Under a QC policy that adopts the AFDC offset, this would constitute an error. To avoid errors in such instances, certification policy would have to require that the worker compute the allotment using the correct AFDC grant.

This analysis addresses only the first set of implications, the effects of an AFDC offset on States' food stamp error rates and fiscal liabilities. With the Hunger Prevention Act now adopting the combined payment error rate as the basis for fiscal liabilities, this issue takes on new significance. Prior attention to error interactions between food stamps and AFDC has focused solely on the food stamp overpayment error rate. The situation of greatest prior concern to States was the case found overpaid in both AFDC and food stamps, where an offset (if appropriate at all) would reduce the food stamp overpayment amount. However, the previous research gave no attention to the potential impact on the underpayment error rate, and thus on the combined payment error rate.

To the extent that the possible effects on food stamp error depend on the particular situation of food stamp cases receiving an incorrect AFDC payment, one must address this issue empirically. Moreover, to compute properly the AFDC offset on a case-by-case basis, one must examine cases for which both an AFDC and food stamp review has been conducted.

A. BACKGROUND

A 1985 study by the Center on Budget and Policy Priorities observed that some payment errors are double-counted by the food stamp QC system.¹ For example, if an AFDC/food stamp case has unreported income, the case will be regarded as overpaid in both programs. Yet the amount of misspent government funds is not the sum of both overpayments. The reason is that the food stamp allotment amount is reduced by \$30 for every \$100 of net countable income, which includes the AFDC payment itself.

Suppose that a household receiving both AFDC and food stamps has \$100 in unreported unearned income. The AFDC overpayment would be calculated as \$100, and the food stamp overpayment as \$30 (30 percent of \$100). Yet the amount of misspent funds is only \$100, not \$130. That is, if the income had been correctly reported to both programs, the AFDC payment would have been \$100 lower, leaving the food stamp allotment unchanged. The 1985 study contended that States' fiscal sanctions for errors were overstated, reflecting the sum of the AFDC and food stamp overpayments rather than the net government cost.

¹Center on Budget and Policy Priorities, "Does the Food Stamp Error Rate Overstate the Loss to the Federal Government through Errors?" June 1985.

FNS replied in a 1986 report noting that if a food stamp case is correctly paid, the use of the correct rather than the actual AFDC payment can create a food stamp error that was not present before.¹ Suppose, for example, that the only error in an AFDC/food stamp case was excess AFDC resources. The AFDC case was thus ineligible, but the food stamp case was correctly paid (as the household met the food stamp asset test). Based on a correct AFDC payment of 0, however, the corresponding food stamp case was underpaid. Furthermore, if recorded AFDC and food stamp errors are in opposite directions, food stamp errors will be exacerbated rather than reduced by use of the correct AFDC payment.

The quantitative importance of the double-counting of errors was then analyzed in a 1987 report to the Congress by FNS.² The estimated effect was substantial, reducing the national overpayment error rate for that period from 8.6 percent to 8.1 percent, and reducing the sum of States' fiscal liabilities by 20 percent. Lacking AFDC case data, however, this earlier analysis required various assumptions in order to estimate the correct AFDC payment:

- that AFDC payments were based on the same income information or misinformation used to determine the food stamp allotments;
- that all earners received the \$30 plus one-third disregard and the full \$75 work expense allowance in computing their AFDC payments; and
- that any wrongful inclusions or exclusions of household members from the food stamp case were mirrored in the AFDC case, the impact on which was then determined from State-specific AFDC benefit tables.

These assumptions are not valid for all situations. Although in most States the AFDC and food stamp agencies have access to the same information about a case, this depends on the organization of the welfare department. The earnings disregards and work expense allowances may be lower than the maximum values for some recipients—in fact, the earnings disregard is just \$30 for AFDC recipients who have had

¹U.S. Department of Agriculture, Food and Nutrition Service, "Does the Food Stamp Error Rate Overstate the Loss to the Federal Government through Errors?" March 1986.

²U.S. Department of Agriculture, Food and Nutrition Service, "The Food Stamp Program Quality Control System: A Report to the U.S. Congress," May 1987. The FNS analysis was based on the following technical study: James C. Ohls and Jennifer Schore, "Potential Effects of Program Changes on Food Stamp Program Error Rates," Mathematica Policy Research, May 26, 1987. This study calculated the impact on the food stamp overpayment error rate of using correct rather than actual AFDC benefit amounts in the food stamp QC sample from July and August of 1984.

earnings for more than four consecutive months. A person may be wrongfully included in a food stamp case—having failed to comply with an employment and training requirement, for example—and yet properly be a member of the corresponding AFDC case.

A more serious limitation of the earlier analysis is the exclusion of all AFDC-only errors. A study of program error rates found that in the integrated-review States, single-program overpayments were twice as common as dual-program overpayments.¹ This suggests that a considerable amount of food stamp error creation could occur if correct AFDC payments were used in the food stamp calculations.

Given that most AFDC errors are overpayments, single-program AFDC errors would be likely to cause food stamp underpayments. Now that underpayments are included in the official combined payment error rate, impacts on error rates could be reversed. Furthermore, fiscal liabilities are now calculated quite differently; not only are underpayments taken into account, but the national tolerance level reflects historical experience. For these reasons, a new analysis of this issue is warranted.

The analysis presented here uses a different approach than that employed earlier. Rather than attempting to impute correct AFDC payments based on information contained in food stamp QC reviews in all States, we focus on the States in which integrated reviews occur, for which the correct AFDC payments as determined by the QC process are known. The data come from the Integrated Quality Control System (IQCS) reviews of AFDC and food stamp cases for FY 1988, the most recent available IQCS sample data. Integrated QC data were available for 24 States, representing 34 percent of nationwide food stamp households and 32 percent of national issuances. The 24-State weighted average for the reported overpayment error rate, 6.8 percent, is close to the 1988 national weighted average of 6.9 percent. Four of the nine States subject to fiscal liabilities in FY 1988 entered the analysis. The geographic distribution of the 24 included States was disproportionately northern, as no States in the FNS' Southeast or Southwest regional offices integrated their food stamp and AFDC reviews for 1988.

We define the "AFDC offset" as the change that would occur in the food stamp error amount if the food stamp allotment were based on the correct rather than the actual AFDC payment. For those cases that did not receive AFDC, there is no offset. Likewise, there is no offset for cases that received the correct AFDC payment. For eligible food stamp cases that received an incorrect AFDC payment,

¹Nancy R. Burstein, Marie E. Hojnacki, and Kaye G. Husbands, "Differences Between Food Stamp and AFDC Error Rates," Abt Associates Inc., Cambridge, Mass., March 1988.

in most instances we calculate the offset as 30 percent of the AFDC error amount. For some cases, however, the offset is smaller than this in absolute value, and we applied the smaller offset rather than using the 30 percent rule. First, the offset is zero for cases that are ineligible for food stamps for reasons unrelated to income—e.g., because of excess assets or lack of U.S. citizenship. For these cases, the error was not double-counted; the net government cost is indeed the sum of the payment errors in the two programs. That is because the case would still be ineligible if it were not receiving AFDC.

There are other situations in which the offset is either zero or less than 30 percent of the AFDC error amount. For example, if net countable income is zero for an AFDC/food stamp case based on the actual AFDC payment amount and if the AFDC case were overpaid, use of the correct (i.e., lower) AFDC amount would not alter the food stamp benefit. The offset in this instance is zero. Similarly, if the net countable income is positive, but less than the amount of the AFDC overpayment, the offset is less than 30 percent of the AFDC overpayment; in fact, it is equal to 30 percent of net countable income.

Using such rules, we calculated the AFDC offset for each case in the FY 1988 integrated-review sample. We then recomputed the corresponding error rates for the various States. The results are presented in the following section for both the overpayment error rate and the combined payment error rate. The implications for States' fiscal liabilities are then discussed. Because the AFDC offset may increase underpayments, now included in the error measure on which fiscal liabilities are based, one can expect some shift in the pattern of liabilities.

B. ANALYSIS AND FINDINGS

Error Rates

Exhibit III.1 shows the overpayment error rate for the 24 integrated-review States and the adjusted value when food stamp allotments are based on correct rather than actual AFDC payments. The final column shows the impact of the AFDC offset. In all but one of the 24 States, the AFDC offset would reduce the overpayment error rate. The reduction would range from 0.1 to 1.1 percentage points. For all 24 States, the average impact is a reduction in the overpayment error rate of 0.4 percentage points.

Corresponding figures for the combined payment error rate, which includes underpayments as well as overpayments, are shown in Exhibit III.2. Here we see that the AFDC offset would actually increase the error rate in 15 of the 24 States. The increases would range from 0.1 to 1.2 percentage

Exhibit III.1

IMPACT OF AFDC OFFSET ON OVERPAYMENT ERROR RATE

State	Overpayment error rate		
	Without offset	With offset	Change
As a percentage of total allotments			
Alaska	6.5	6.3	-0.2
California	6.4	5.8	-0.6
Colorado	3.5	3.5	-0.1
Connecticut	5.7	4.8	-0.9
Delaware	5.9	5.7	-0.2
Idaho	6.2	6.1	-0.1
Illinois	8.2	7.8	-0.4
Indiana	8.5	8.3	-0.2
Iowa	8.2	7.7	-0.5
Kansas	4.4	4.1	-0.3
Massachusetts	4.9	4.2	-0.7
Michigan	6.0	5.4	-0.6
Montana	4.8	4.7	-0.1
New Hampshire	4.7	4.7	-0.1
North Dakota	3.4	3.3	-0.1
Oregon	8.5	8.3	-0.1
Rhode Island	4.2	4.0	-0.2
South Dakota	3.1	3.1	-0.0
Utah	6.3	6.1	-0.3
Vermont	5.6	5.0	-0.6
Washington	6.7	6.2	-0.5
West Virginia	8.5	8.3	-0.1
Wisconsin	7.2	6.2	-1.1
Wyoming	3.6	3.7	0.1
TOTAL (24 States)*	6.8	6.3	-0.4

Note: a. Total error rates are weighted by annual State allotments for FY 1988.

Exhibit III.2

IMPACT OF AFDC OFFSET ON COMBINED PAYMENT ERROR RATE

State	Combined payment error rate		
	Without offset	With offset	Change
As a percentage of total allotments			
Alaska	9.0	8.9	-0.1
California	10.4	11.5	1.1
Colorado	5.4	5.4	-0.0
Connecticut	7.4	8.6	1.2
Delaware	7.8	7.9	0.1
Idaho	7.6	7.5	-0.1
Illinois	10.2	9.9	-0.3
Indiana	10.4	10.6	0.2
Iowa	10.2	10.6	0.4
Kansas	6.1	6.3	0.2
Massachusetts	6.2	6.6	0.4
Michigan	7.6	7.8	0.2
Montana	6.2	6.2	-0.0
New Hampshire	6.8	6.8	0.0
North Dakota	4.7	4.8	0.1
Oregon	10.1	10.1	-0.0
Rhode Island	6.7	7.3	0.6
South Dakota	4.1	4.0	-0.0
Utah	8.0	8.1	0.1
Vermont	7.0	8.1	1.2
Washington	8.2	8.3	0.1
West Virginia	9.9	10.1	0.2
Wisconsin	9.9	9.5	-0.4
Wyoming	6.8	7.1	0.3
TOTAL (24 States)*	9.0	9.2	0.2

Note: a. Total error rates are weighted by annual State allotments for FY 1988.

points. Negligible impacts are seen in 5 States, with decreases in the remaining 4. Overall, the effect is a small net increase in the combined payment error rate of 0.2 percentage points.

To shed further light on these results, one can group the effects of the offset as follows:

- finding unchanged: that is, a case is correct regardless of the AFDC offset, is overpaid regardless of the AFDC offset, or is underpaid regardless of the AFDC offset;
- error created: a correct case becomes either overpaid or underpaid;
- error eliminated: an overpaid case becomes correctly paid, or an underpaid case becomes correct; and
- error reversed: an overpaid case becomes underpaid, or an underpaid case becomes overpaid.

For 95.4 percent of cases, the QC finding was unchanged. Unexpectedly, 2.4 percent of cases--i.e., fully one-half of those with changes--are correct cases becoming underpaid. This situation arises when an error which leads to an AFDC overpayment does not itself affect the food stamp allotment--for example, if a case is categorically ineligible for AFDC. This sort of error creation does not affect the food stamp overpayment error rate, but does increase the combined payment error rate. Hence, if the main effect of the AFDC offset is to create underpayments, it is not surprising that we see an increase in the combined payment error rate along with a fall in the overpayment error rate.

Other changes in error status that occur in a substantial number of cases are:

- Correct cases becoming overpaid (0.8 percent of cases). This occurs if an AFDC case was underpaid while the food stamp case was correct--due, for example, to excluding a household member from the AFDC case who should have been counted. The food stamp case is now labelled overpaid because it is credited with the additional AFDC income.
- Overpaid cases becoming correct (0.5 percent of cases). This is the classic situation in which unreported income has caused an overpayment in both programs. Based on the correct, lower AFDC payment, the food stamp case is correct.
- Overpaid cases becoming underpaid (0.6 percent of cases). This can occur through an AFDC error in underreported earnings. For cases having received AFDC beyond four months, the AFDC error equals the full amount of underreported earnings. However, the Food Stamp Program counts only 80 percent of earnings as countable income, allowing 20 percent as an earned income deduction. Thus, based on correct earnings and the correct AFDC

payment, the food stamp case would actually have less countable income than based on the erroneous values—hence the underpayments.¹

It is noteworthy that the change in error status that was expected to be typical—overpaid cases becoming correct—occurs only about a fifth as often as correct cases becoming underpaid.

Fiscal Liabilities

The implications for fiscal liabilities are very different than those found in the earlier-cited 1987 analysis, for two reasons. First, because of changes in the Hunger Prevention Act, liabilities are now based on underpayments as well as overpayments. We found here that the most common effect of the AFDC offset is to increase underpayments. This factor alone would suggest that liabilities to States would be higher with the AFDC offset, rather than 20 percent lower as found before.

At the same time, however, the formula for computing liabilities has changed. Instead of holding States to a fixed national error rate tolerance of 5 percent, States are now subject to liability on the basis of the difference between their combined payment error rate and the lowest attained value of the national mean, plus one percentage point. If a change such as the implementation of the AFDC offset increased the measured error rate in each State by 0.2 percentage points, and error rates were falling, there would be no impact on liabilities (because the national tolerance level would also be 0.2 percentage points higher for everyone). If error rates were rising, and States were held to tolerance levels of earlier years, there would be an increase in liabilities of 0.2 percent of allotments for those that were above the tolerance.

In fact, however, the impact of the AFDC offset varies by State. As a consequence, there can be substantial changes in particular States' liabilities. Exhibit III.3 shows these estimated changes, subject to the limitations of the data. The first two columns of Exhibit III.3 simply repeat (to two decimals) the values of the combined payment error rate previously shown in Exhibit III.2. These estimates are based solely on State-reported QC data; the error rates in the first column (without offset) thus differ from the official combined payment error rates in each State, which reflect federal re-review findings and adjustments for incomplete reviews. If we treat the 24 integrated-review States illustratively as the nation, and assume that their average error rate has been constant or falling, we can compute liabilities

¹Assuming \$100 in underreported earnings, the correct AFDC grant is \$100 lower than its actual value. The effect on food stamp countable income is a net decrease of \$20—\$100 lower because of the lower AFDC grant and \$80 higher because of the higher countable earnings. Lowering countable income by \$20 raises the food stamp allotment by 30 percent, or \$6. Hence, the offset results in a \$6 food stamp underpayment.

Exhibit III.3

IMPACT OF AFDC OFFSET ON FISCAL LIABILITIES

STATE	Combined payment error rate, %		Liability rate, % ^a		Liability amount, \$ thousands		
	Without offset	With offset	Without offset	With offset	Without offset	With offset	Change
Alaska	8.99%	8.94%					
California	10.41	11.47	0.43	1.27	\$2,969	\$8,870	\$5,901
Colorado	5.42	5.37					
Connecticut	7.42	8.61					
Delaware	7.82	7.82					
Idaho	7.60	7.51					
Illinois	10.23	9.92	0.25	0.00	1,791	0	-1,791
Indiana	10.37	10.56	0.39	0.36	734	680	-54
Iowa	10.20	10.56	0.22	0.36	228	365	137
Kansas	6.08	6.29					
Massachusetts	6.16	6.58					
Michigan	7.58	7.78					
Montana	6.22	6.21					
New Hampshire	6.77	6.77					
North Dakota	4.74	4.83					
Oregon	10.07	10.05	0.09	0.00	132	0	-132
Rhode Island	6.78	7.29					
South Dakota	4.07	4.03					
Utah	8.03	8.09					
Vermont	6.97	8.13					
Washington	8.23	8.29					
West Virginia	9.92	10.11					
Wisconsin	9.89	9.47					
Wyoming	<u>6.80</u>	<u>7.11</u>			—	—	—
TOTAL (24 states)	8.98	9.20			\$5,854	\$9,915	\$4,061
Tolerance Level	9.98	10.20					

Note: a. Without offset, equals the combined payment error rate minus 9.98. With offset, equals the combined payment error rate minus 10.20.

both with and without the offset. In the absence of the offset, the combined payment error rate for the 24 States is 8.98 percent. Hence States' liabilities are calculated as the product of their aggregate food stamp allotments and their "liability rate"—the excess of their error rate over 9.98 percent ($8.98 + 1.00$). The \$5.9 million sum of liabilities based on these assumptions consists of \$3.0 million for California, \$1.8 million for Illinois, and smaller amounts for Indiana, Iowa, and Oregon. For any given State, these estimated amounts will differ from the announced liabilities for FY 1988 for several reasons. First, as noted above, the analysis necessarily uses State-reported error rates versus the official values. Secondly, each State's estimated error rate is then compared to a tolerance level (9.98 percent) based on the performance of the 24 States, versus the official tolerance level (10.80 percent) based on the performance of all States.

Implementation of the AFDC offset would increase the sum of liabilities in these 24 States by more than two-thirds—from \$5.9 million to \$9.9 million. This is due almost entirely to the increase in the combined payment error rate for California, already well above the mean, to 11.47 percent. California alone would have liabilities of nearly \$9 million—a \$6 million increase for that State. The liabilities for Illinois and Oregon would be eliminated. Indiana and Iowa would experience a decrease of \$54,000 and an increase of \$137,000 in liabilities, respectively. The other States would be unaffected. Thus the error-creation aspect of the AFDC income offset would be dramatic for at least one State, under the current liability rules.

If one conducts this entire analysis excluding California, the estimated impact of the AFDC offset on the total amount of fiscal liabilities becomes very different. (This involves a recalculation of the tolerance levels—based on 23-State weighted averages of the combined payment error rate, both with and without the AFDC offset—and then a corresponding re-calculation by State of the liability rates and the liability amounts.) In this 23-State re-analysis, the use of the AFDC offset causes the total liability amount to fall by more than one-fourth, versus the substantial rise noted above in the 24-State simulation. The estimated effect of an AFDC offset on the pattern of fiscal liabilities is clearly sensitive to the particular grouping of included States. One should thus interpret these liability estimates with caution.

CHAPTER IV

RELATIONSHIP BETWEEN FOOD STAMP OVERPAYMENT AND UNDERPAYMENT

From the enactment of the Food Stamp Amendments of 1982 until the passage of the Hunger Prevention Act of 1988, States faced fiscal liabilities for excessive overpayment, but no corresponding adverse consequences for high rates of underpayment or negative action error.¹ The different treatment of overpayment and underpayment error during the mid-1980s raised the possibility that States, in seeking to control overpayment error and thereby avoid liabilities, became less attentive to underpayments and allowed such errors to rise. This analysis uses food stamp error rates from 1980 through 1990 to examine whether this concern has any empirical basis and whether error patterns have shifted since the Hunger Prevention Act.

In one early response to this general concern, the Food and Nutrition Service (FNS) conducted a study in 1985 to examine whether the system of error rate liabilities in the Food Stamp Program had "caused an emphasis on overpayment errors to the detriment of improving all payment errors" and whether this emphasis had "resulted in administrative decisions that encourage judgments against clients."² The historical period under study included the eight semiannual quality control reporting periods during Fiscal Years 1980 to 1983. A subsequent study by USDA extended the analysis through Fiscal Year 1986.³

¹For Fiscal Years 1981 and 1982, States were subject to liabilities for excessive errors based on the "cumulative allotment error rate" for both overpayment and underpayment errors. This policy approach was then reinstated by the Hunger Prevention Act of 1988, retroactive to Fiscal Year 1986. Since Fiscal Year 1981, both underpayment and negative action error have been considered in the determination of enhanced funding of administrative costs, for States achieving low error rates.

²See U.S. Department of Agriculture, Food and Nutrition Service, Office of Analysis and Evaluation, "The Relationship Between Overpayment and Underpayment Error Rates in the Food Stamp Program: A Preliminary Analysis," by Robert Dalrymple, November 1985.

³Gregory B. Mills, "The Relationship Between Overpayments and Underpayments in the Food Stamp Program," Abt Associates Inc., Cambridge, Massachusetts, September 1988.

The present analysis re-examines the relationship between overpayment and underpayment error, employing more recent data and reconsidering the issues in light of the Hunger Prevention Act reforms.¹ With fiscal liabilities once again based on a national error rate tolerance that includes both overpayment and underpayment, do recent error rates suggest that States are maintaining payment accuracy in a more balanced fashion?

A. FINDINGS

The 1980-1990 experience of States in the Food Stamp Program indicates that reducing overpayment errors has not led to more underpayments. To the contrary, the evidence suggests that lower overpayments have been associated with lower underpayments. This relationship is found when one examines either the cross-sectional variation in error among States or—more pertinently—the year-to-year variation in error for individual States. These findings are all based on a measure of underpayments that includes underissuances to eligible cases but does not include erroneous denials or terminations.

The analysis undertaken in this study addresses three specific questions and reaches the following findings:

Do interstate comparisons indicate that food stamp overpayments and underpayments are systematically related to each other, either positively or negatively? Among States in any given year, the error rates for overpayment and underpayment are positively related. Thus, a State with a lower than average overpayment error rate tends also to have a lower error rate for underpayment. The correlation between overpayment and underpayment error was significantly positive in each of the eleven years under study.

Are States able individually to reduce their food stamp overpayment errors without increasing their underpayments? This is the more relevant question in addressing concerns about the need to control both overpayment and underpayment error. Several separate findings suggest that States are able to reduce overpayments with no worsening of their underpayment error rate.

¹The analysis reported here uses a data set containing 585 State observations for annual regressed dollar error rates. Data were available for 54 jurisdictions, including the 50 States, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands. For 53 of these jurisdictions, eleven annual observations were available, representing Fiscal Years 1980 through 1990. For Puerto Rico, observations were available only for 1980 and 1981, prior to the conversion of the program to a block grant. For analysis of year-to-year changes in error rates, this data set yielded 531 observations.

- The correlation between overpayment and underpayment error rates, when computed separately by State for the eleven-year interval of generally declining overpayments, was significantly positive for 13 States. For 38 States, the correlation was not significantly different from zero. For only two States was the correlation significantly negative.
- To the extent that significant correlations exist between the year-to-year changes in overpayments and underpayments observed among all States, these correlations were also positive.
- In a multivariate analysis controlling for State-specific and year-specific effects on error, a lower level of overpayments was significantly associated with a lower level of underpayments.

Since enactment of the Hunger Prevention Act, do error rate patterns suggest that States are adopting a more balanced effort to control both overpayment and underpayment? The error rates in 1989 and 1990 reflect no discernible shift in the mix of overpayment and underpayment errors. This recent period shows no departure from previous years in the correlation between overpayment and underpayment error. The multivariate analysis of error rates for 1980 to 1990, accounting explicitly for State-specific effects on error, also reveals no pattern in State performance for either 1989 or 1990 that differs from the previous several years.

B. ANALYSIS

This section discusses the three separate analyses on which the findings are based. The first is an analysis of cross-sectional variation in error rates, assessing whether States with relatively low rates of overpayment error also tend to achieve relatively low rates of underpayment error. The second analysis examines the movements in error rates by State to establish whether the observed year-to-year changes in overpayment and underpayment error by State are systematically related. The third approach is a more generalized, multivariate analysis of the relationship between overpayments and underpayments, accounting for the effects of State-specific and time-specific circumstances.¹

¹For a more detailed description of these various approaches and the findings, see the accompanying technical report available from the Food and Nutrition Service: Gregory B. Mills, "The Relationship Between Overpayments and Underpayments in the Food Stamp Program: An Updated Analysis," Abt Associates Inc., Cambridge, Mass., September 1991.

State-to-State Variation in Error Rates

The standard approach for examining the degree of association between such error rate measures is to compute the correlation coefficient between them, as was done in the 1985 FNS study. Here, the correlation was computed for each of the eleven annual reporting periods and also for the observations pooled over the entire eleven-year interval (Exhibit IV.1). In all instances, the correlation coefficient was significantly positive (different from zero at the 10 percent significance level or better). The values of the coefficient ranged from .256 in 1981 to .616 in 1980.¹ These findings indicate that States with lower overpayment error than other States also tend to achieve lower underpayment error.

State-Specific Variation in Error Rates

As a next step in examining error patterns, the eleven annual observations for each jurisdiction were used to compute a State-specific correlation coefficient between the official error rates for overpayments and underpayments (Exhibit IV.2). Of the 53 States subject to analysis, 13 have correlations that are significantly positive, ranging from .883 (Michigan) to .525. Two States, Louisiana and Wyoming, have a significant negative correlation.

We then computed the correlation between the year-to-year change in overpayments and the corresponding change in underpayments. For the pooled set of 531 observations, the correlation was found to be .117, low but significantly different from zero. Among the ten separate year-to-year intervals, the correlation was found to be significantly positive only for 1983-to-1984 (.244) and 1984-to-1985 (.265). Such correlations indicate that both types of error were indeed moving typically in the same direction, but not with a high degree of association.

Multivariate Analysis of Error Rates

The foregoing analyses adopted a bivariate framework, with overpayment and underpayment error rates treated as outcome variables subject to some unknown degree of association. The statistical relationships were measured without taking explicit account of other factors that might affect error.

¹The change in the coefficient between these two particular periods was found to be significant at the 5 percent level. Subsequent year-to-year differences in coefficients were found not to be significant at the 10 percent level.

EXHIBIT IV.1**CORRELATION BETWEEN
OVERPAYMENT AND UNDERPAYMENT
REGRESSED DOLLAR ERROR,
FISCAL YEARS 1980 TO 1990**

Fiscal year	Correlation coefficient	Number of State observations ^a
1980	.616***	54
1981	.256*	54
1982	.343**	53
1983	.437***	53
1984	.542***	53
1985	.597***	53
1986	.404***	53
1987	.597***	53
1988	.390***	53
1989	.345**	53
1990	.363***	53
Pooled total	.385***	585

* Different from zero at the 10 percent significance level.

** Different from zero at the 5 percent significance level.

***Different from zero at the 1 percent significance level.

Note: a. Error rate data for Puerto Rico are not available after Fiscal Year 1981, due to the subsequent conversion of the program to a block grant.

EXHIBIT IV.2**STATES WITH
STATISTICALLY SIGNIFICANT
CORRELATION BETWEEN
OVERPAYMENT AND UNDERPAYMENT
REGRESSED DOLLAR ERROR,
FISCAL YEARS 1980 TO 1990**

State		Correlation coefficient
1.	Michigan	.883***
2.	Connecticut	.851***
3.	South Dakota	.846***
4.	Oregon	.740***
5.	Arkansas	.734**
6.	Wisconsin	.712**
7.	Hawaii	.651**
8.	Arizona	.643**
9.	Utah	.639**
10.	Colorado	.616**
11.	West Virginia	.539*
12.	Oklahoma	.536*
13.	Nevada	.525*
14.	Louisiana	-.659**
15.	Wyoming	-.695**
Number of annual observations per State		11
Number of States subject to analysis		53

* Different from zero at the 10 percent significance level.

** Different from zero at the 5 percent significance level.

***Different from zero at the 1 percent significance level.

Our final analysis introduced a more formal modelling framework, where the underpayment error rate observed in each State in each year is treated as the outcome variable, and where the corresponding overpayment error rate (its level and/or its change from the prior year) is treated as an explanatory variable amidst many other contributing effects. In particular, each State is assumed to exert an effect on underpayments that is different from other States, as a result of its distinctive combination of policy provisions, administrative practices, demographic characteristics, socioeconomic conditions, and other circumstances influencing payment accuracy. This "State effect" is assumed to be constant for each State across all time periods. Similarly, each time period is assumed to contribute an effect on underpayments, as a result of nationwide factors that exert the same influence on all States in any given year. This "time effect" corresponds to such factors as federal program policies, quality control measurement procedures, or macroeconomic conditions. By using the data to explicitly control for the effects on underpayment that are specific to individual States and time periods, our analysis is then better able to isolate any systematic relationship between a State's overpayment and underpayment error rates.

Several different equations were estimated by ordinary least-squares regression to test the possible effects of overpayment error on the underpayment error rate when controlling for the State effects and time effects. For each equation, 56 to 57 percent of the variation in the underpayment error rate is explained by the included independent variables—a high level of explained variation for such multivariate models in the social sciences.

These multiple regression findings can be summarized as follows. A State's annual underpayment error rate cannot be predicted well by information about the State's overpayment error rate—either about the overpayment error rate itself, its change from the previous year, or both. To the extent that the overpayment and underpayment error rates are systematically related, after adjusting for State-specific and time-specific effects on error, a lower overpayment error rate is associated with a lower underpayment error rate. These findings thus do not support the view that States tend to reduce overpayment error in ways that result in higher underpayment error. Finally, the year-specific effects estimated for 1989 and 1990 show no distinctive shift in error patterns that one might attribute to the enactment of the Hunger Prevention Act.

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APPENDIX:

Food Stamp Error Rates, By State, Fiscal Years 1980-1990

Notes: The overpayment error rates include both issuances to ineligible cases and overissuances to eligible cases. The underpayment error rates indicate underissuances to eligible cases. The combined payment error rate may not equal the sum of the overpayment and underpayment error rates due to rounding.

All error rates are expressed as a percentage of allotments.

The error rates for Fiscal Year 1980 reflect State findings only and are not regressed on the basis of federal re-reviews. For all subsequent years, error rates reflect both State and federal findings.

Beginning in Fiscal Year 1981 for overpayment and in Fiscal Year 1986 for underpayment, the error rates include an adjustment for the noncompletion of State QC reviews for sample cases.

The U.S. average error rates, shown at the end of the Appendix, are weighted by State monthly allotments.

This appendix presents the official error rates available as of September 1991. These error rates are subject to change as a result of corrections or adjustments to individual State QC findings.

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
Alabama	1980	8.29	1.89	10.18
	1981	7.36	1.97	9.33
	1982	5.72	1.82	7.53
	1983	6.92	1.96	8.89
	1984	2.91	2.37	5.28
	1985	3.06	2.06	5.05
	1986	2.64	1.28	3.92
	1987	8.04	2.70	0.74
	1988	8.04	1.82	9.86
	1989	3.84	2.00	5.84
	1990	4.20	1.56	5.75
Alaska	1980	11.88	2.64	14.52
	1981	3.23	1.90	5.13
	1982	0.80	2.73	3.52
	1983	3.86	2.46	6.32
	1984	9.14	2.98	2.12
	1985	2.89	2.73	5.62
	1986	7.00	1.67	8.67
	1987	4.53	1.95	6.49
	1988	7.61	3.23	0.83
	1989	7.25	3.24	0.49
	1990	5.58	1.80	7.38
Arizona	1980	10.87	3.02	13.89
	1981	2.25	3.77	6.02
	1982	1.98	2.74	4.72
	1983	9.79	3.28	3.07
	1984	9.58	3.39	2.97
	1985	9.38	2.48	1.86
	1986	7.55	1.89	9.44
	1987	6.85	2.54	9.39
	1988	7.34	2.51	9.85
	1989	7.83	2.75	0.58
	1990	8.04	2.89	0.93

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
Arkansas	1980	7.48	1.56	9.04
	1981	9.17	2.51	1.68
	1982	9.64	2.81	2.45
	1983	8.77	1.95	0.73
	1984	9.75	2.23	1.98
	1985	7.88	1.76	9.64
	1986	6.71	1.92	8.63
	1987	3.70	1.58	5.28
	1988	4.30	1.14	5.44
	1989	5.33	1.89	7.22
	1990	4.15	1.83	5.99
California	1980	7.51	3.06	10.57
	1981	7.11	3.16	0.27
	1982	8.61	3.00	1.60
	1983	6.98	3.83	0.80
	1984	7.70	2.81	0.51
	1985	7.05	3.14	0.19
	1986	8.31	3.79	2.11
	1987	8.54	3.66	2.20
	1988	7.39	4.35	1.75
	1989	7.40	3.67	1.07
	1990	7.55	4.09	1.64
Colorado	1980	8.62	1.43	10.05
	1981	2.87	2.58	5.45
	1982	5.07	2.53	7.60
	1983	2.63	2.33	4.96
	1984	0.72	2.03	2.75
	1985	6.99	1.18	8.17
	1986	5.28	1.70	6.98
	1987	5.82	2.22	8.04
	1988	6.63	2.00	8.63
	1989	6.03	1.68	7.72
	1990	4.29	1.99	6.28

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
Connecticut	1980	9.97	1.70	11.67
	1981	3.78	3.16	6.94
	1982	2.73	3.14	5.88
	1983	2.80	2.79	5.59
	1984	7.11	1.90	9.01
	1985	7.04	1.78	8.82
	1986	5.88	1.75	7.63
	1987	6.81	1.97	8.78
	1988	6.15	1.53	7.68
	1989	7.69	1.73	9.42
	1990	7.54	2.53	0.08
Delaware	1980	9.84	2.22	12.06
	1981	7.45	2.76	0.21
	1982	6.40	2.07	8.47
	1983	4.94	1.87	6.81
	1984	6.31	2.35	8.66
	1985	7.15	1.76	8.91
	1986	6.52	1.61	8.13
	1987	4.05	1.84	5.89
	1988	6.29	2.26	8.54
	1989	5.66	2.75	8.41
	1990	6.11	2.20	8.31
District of Columbia	1980	14.86	3.75	18.61
	1981	3.12	4.79	7.91
	1982	1.10	5.84	6.94
	1983	0.08	3.09	3.17
	1984	8.80	3.23	2.03
	1985	9.81	2.93	2.74
	1986	9.66	2.51	2.16
	1987	6.29	3.02	9.31
	1988	0.99	3.58	4.57
	1989	7.53	2.32	9.85
	1990	5.80	3.36	9.16

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
Florida	1980	8.83	2.43	11.26
	1981	2.85	2.30	5.15
	1982	0.25	2.69	2.94
	1983	0.31	3.10	3.41
	1984	8.94	2.48	1.42
	1985	6.71	1.87	8.58
	1986	5.95	2.09	8.04
	1987	7.32	3.00	0.32
	1988	6.08	3.30	9.37
	1989	7.60	3.49	1.09
	1990	7.05	2.61	9.66
Georgia	1980	9.48	2.54	12.02
	1981	9.80	2.71	2.51
	1982	8.34	2.37	0.71
	1983	7.53	2.35	9.88
	1984	9.89	3.42	3.31
	1985	2.18	3.67	5.65
	1986	2.46	2.04	4.50
	1987	0.46	4.16	4.63
	1988	8.63	2.17	0.80
	1989	6.87	3.21	0.08
	1990	9.34	3.87	3.22
Guam	1980	6.40	0.56	6.96
	1981	7.97	1.94	9.91
	1982	5.31	1.69	7.00
	1983	7.57	1.42	8.99
	1984	3.39	1.16	4.55
	1985	5.33	1.11	6.44
	1986	3.97	1.41	5.38
	1987	7.18	1.30	8.49
	1988	3.65	1.11	4.76
	1989	4.42	0.51	4.93
	1990	3.41	2.40	5.80

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
Hawaii	1980	4.49	1.89	6.38
	1981	6.97	2.33	9.30
	1982	5.96	1.86	7.82
	1983	4.28	1.24	5.52
	1984	3.70	1.08	4.78
	1985	4.35	1.25	5.60
	1986	4.11	1.00	5.11
	1987	3.63	0.78	4.42
	1988	4.46	0.88	5.34
	1989	3.94	1.12	5.06
	1990	2.49	1.57	4.06
Idaho	1980	10.29	2.16	12.45
	1981	9.49	2.00	1.50
	1982	8.32	2.10	0.43
	1983	8.48	1.64	0.12
	1984	6.96	1.82	8.78
	1985	5.01	0.96	5.97
	1986	4.46	1.67	6.13
	1987	6.54	1.71	8.25
	1988	8.44	1.97	0.45
	1989	5.31	2.54	7.85
	1990	6.39	2.04	8.44
Illinois	1980	9.95	3.55	13.50
	1981	8.50	2.96	1.47
	1982	8.93	2.03	0.95
	1983	7.23	2.41	9.63
	1984	8.31	2.92	1.23
	1985	8.16	2.42	0.58
	1986	9.17	1.92	1.10
	1987	8.73	2.33	1.03
	1988	8.37	2.15	0.52
	1989	8.25	2.17	0.42
	1990	8.77	2.06	0.83

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
Indiana	1980	7.43	1.72	9.15
	1981	8.08	0.89	8.97
	1982	7.41	2.33	9.73
	1983	8.77	2.06	0.83
	1984	8.95	1.74	0.69
	1985	0.90	1.47	2.37
	1986	9.96	1.51	1.46
	1987	9.85	2.11	1.96
	1988	9.06	2.31	1.37
	1989	7.59	2.32	9.90
	1990	8.22	3.16	1.38
Iowa	1980	10.26	1.99	12.25
	1981	9.11	1.46	0.57
	1982	9.25	1.66	0.91
	1983	8.81	1.97	0.79
	1984	8.48	1.54	0.02
	1985	8.41	1.42	9.83
	1986	6.25	1.93	8.18
	1987	7.13	2.17	9.30
	1988	8.41	2.23	0.64
	1989	8.65	1.98	0.64
	1990	8.96	2.86	1.82
Kansas	1980	10.39	2.46	12.85
	1981	1.12	2.52	3.63
	1982	9.69	1.51	1.20
	1983	9.11	1.88	0.99
	1984	7.36	2.31	9.67
	1985	8.16	1.99	0.15
	1986	6.16	1.85	8.01
	1987	4.41	1.60	6.01
	1988	4.30	1.91	6.21
	1989	7.02	1.45	8.47
	1990	5.44	2.55	7.99

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
Kentucky	1980	7.14	1.57	8.71
	1981	7.75	2.00	9.76
	1982	7.15	1.98	9.13
	1983	6.90	1.88	8.78
	1984	8.98	2.03	1.01
	1985	6.00	1.67	7.67
	1986	4.10	1.01	5.11
	1987	4.17	2.19	6.36
	1988	3.43	2.05	5.48
	1989	2.85	1.94	4.79
	1990	3.02	1.34	4.36
Louisiana	1980	9.35	2.30	11.65
	1981	0.45	2.44	2.88
	1982	9.71	2.80	2.51
	1983	9.45	2.48	1.93
	1984	0.15	1.71	1.86
	1985	9.76	2.08	1.84
	1986	0.18	2.49	2.67
	1987	8.01	3.00	1.01
	1988	6.86	2.94	9.80
	1989	9.48	2.34	1.82
	1990	8.64	2.54	1.18
Maine	1980	9.18	2.05	11.23
	1981	8.09	2.61	0.71
	1982	8.49	1.89	0.38
	1983	8.37	2.34	0.71
	1984	6.74	1.57	8.31
	1985	7.91	1.39	9.30
	1986	5.54	2.32	7.86
	1987	5.26	1.24	6.50
	1988	6.78	0.65	7.42
	1989	6.55	1.83	8.39
	1990	7.02	1.33	8.35

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
Maryland	1980	14.60	2.45	17.05
	1981	4.22	2.47	6.68
	1982	9.70	1.63	1.33
	1983	7.12	2.19	9.31
	1984	6.99	1.33	8.32
	1985	7.32	1.43	8.75
	1986	8.06	2.04	0.10
	1987	7.27	2.11	9.38
	1988	6.45	2.18	8.62
	1989	7.99	2.08	0.07
	1990	8.34	2.30	0.64
Massachusetts	1980	10.48	1.65	12.13
	1981	1.31	2.48	3.79
	1982	3.38	2.71	6.09
	1983	3.36	1.87	5.23
	1984	9.86	2.03	1.89
	1985	9.71	1.61	1.32
	1986	1.47	1.45	2.92
	1987	8.59	2.96	1.55
	1988	9.77	1.53	1.30
	1989	8.31	1.12	9.44
	1990	0.88	2.18	3.06
Michigan	1980	10.28	2.99	13.27
	1981	9.30	2.85	2.16
	1982	8.99	2.75	1.74
	1983	7.70	2.07	9.77
	1984	6.46	1.54	8.00
	1985	7.35	2.13	9.48
	1986	8.74	1.83	0.58
	1987	6.56	1.89	8.45
	1988	6.48	1.85	8.33
	1989	6.21	1.37	7.58
	1990	7.14	1.75	8.89

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
Minnesota	1980	6.62	2.16	8.78
	1981	7.65	1.83	9.49
	1982	8.37	1.96	0.33
	1983	7.92	1.72	9.64
	1984	9.77	2.10	1.87
	1985	9.51	2.45	1.96
	1986	8.85	2.80	1.64
	1987	5.87	2.12	8.07
	1988	6.39	2.26	8.65
	1989	7.76	2.74	0.50
	1990	7.25	2.40	9.65
Mississippi	1980	10.36	2.61	12.97
	1981	0.10	1.90	2.00
	1982	9.11	3.39	2.50
	1983	8.36	3.01	1.37
	1984	9.18	1.90	1.08
	1985	7.98	2.28	0.26
	1986	7.82	2.07	9.89
	1987	6.13	1.69	7.82
	1988	6.69	1.38	8.07
	1989	7.63	2.11	9.74
	1990	8.26	1.80	0.07
Missouri	1980	8.00	2.12	10.12
	1981	8.52	2.07	0.60
	1982	7.40	2.41	9.81
	1983	6.74	2.28	9.02
	1984	5.81	1.98	7.79
	1985	5.23	1.43	6.66
	1986	5.41	2.03	7.44
	1987	5.48	3.05	8.46
	1988	5.29	3.51	8.66
	1989	6.01	4.38	0.39
	1990	5.62	2.39	8.00

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
Montana	1980	9.13	1.62	10.75
	1981	3.48	2.28	5.76
	1982	7.56	1.72	9.28
	1983	5.52	1.32	6.84
	1984	8.83	2.16	0.99
	1985	7.44	2.00	9.44
	1986	8.17	1.45	9.63
	1987	5.01	2.24	7.25
	1988	4.46	1.44	5.90
	1989	4.26	1.26	5.52
	1990	4.40	1.90	6.30
Nebraska	1980	12.16	3.58	15.74
	1981	1.02	2.01	3.03
	1982	0.67	2.86	3.53
	1983	7.16	2.36	9.52
	1984	8.75	1.94	0.69
	1985	9.04	1.56	0.60
	1986	6.53	2.51	9.04
	1987	6.80	3.99	0.79
	1988	6.58	2.29	8.87
	1989	8.87	5.22	4.09
	1990	6.86	2.76	9.62
Nevada	1980	4.08	1.75	5.83
	1981	3.39	1.01	4.40
	1982	1.48	0.90	2.38
	1983	2.17	1.05	3.22
	1984	2.54	0.16	2.70
	1985	2.48	0.54	3.02
	1986	2.82	0.39	3.21
	1987	3.64	0.17	3.82
	1988	2.31	0.38	2.69
	1989	3.90	0.92	4.82
	1990	4.78	1.72	6.49

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
New Hampshire	1980	8.70	1.90	10.60
	1981	2.57	2.66	5.23
	1982	6.29	1.82	8.11
	1983	9.99	1.93	1.91
	1984	8.18	1.94	0.12
	1985	4.42	1.88	6.30
	1986	4.02	2.16	6.18
	1987	6.86	3.46	0.32
	1988	5.65	2.12	7.77
	1989	6.38	2.00	8.37
	1990	7.79	2.99	0.78
New Jersey	1980	8.61	1.86	10.47
	1981	9.40	2.11	1.51
	1982	8.68	2.33	1.01
	1983	7.95	2.44	0.39
	1984	7.46	2.15	9.61
	1985	8.50	2.06	0.56
	1986	7.48	1.88	9.36
	1987	7.62	1.86	9.48
	1988	5.66	1.85	7.57
	1989	5.84	1.66	7.50
	1990	5.97	2.25	8.23
New Mexico	1980	13.16	2.35	15.51
	1981	3.34	2.10	5.45
	1982	2.85	2.72	5.56
	1983	1.44	3.03	4.47
	1984	1.61	2.23	3.84
	1985	8.83	2.11	0.94
	1986	0.41	2.50	2.91
	1987	0.40	3.21	3.61
	1988	7.38	2.30	9.68
	1989	6.49	2.33	8.82
	1990	5.42	1.74	7.15

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
New York	1980	15.78	4.11	19.89
	1981	3.63	3.63	7.26
	1982	1.42	3.03	4.45
	1983	9.98	3.21	3.20
	1984	0.14	3.23	3.37
	1985	7.11	3.44	0.55
	1986	7.80	3.46	1.26
	1987	8.55	4.18	2.73
	1988	8.57	4.32	2.89
	1989	1.14	4.10	5.24
	1990	9.54	4.34	3.88
North Carolina	1980	9.74	2.86	12.60
	1981	1.37	4.64	6.00
	1982	0.51	2.46	2.97
	1983	7.71	3.29	1.00
	1984	7.22	3.51	0.73
	1985	6.49	2.34	8.83
	1986	5.67	3.69	9.36
	1987	7.33	4.89	2.22
	1988	6.42	2.72	9.14
	1989	6.23	2.30	8.53
	1990	4.83	2.31	7.14
North Dakota	1980	6.68	1.10	7.78
	1981	5.16	1.97	7.13
	1982	6.89	1.36	8.25
	1983	4.98	0.73	5.71
	1984	6.27	0.64	6.91
	1985	3.53	1.19	4.72
	1986	2.13	1.12	3.25
	1987	3.42	1.01	4.44
	1988	3.71	1.70	5.41
	1989	3.41	2.37	5.78
	1990	3.75	2.11	5.86

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
Ohio	1980	8.45	1.34	9.79
	1981	7.74	1.75	9.50
	1982	8.56	1.56	0.12
	1983	6.90	1.38	8.28
	1984	6.65	1.98	8.63
	1985	7.43	1.24	8.67
	1986	8.33	1.72	0.05
	1987	7.22	2.25	9.47
	1988	9.48	1.30	0.78
	1989	9.17	2.17	1.33
	1990	9.42	1.76	1.18
Oklahoma	1980	6.97	2.31	9.28
	1981	9.31	2.76	2.08
	1982	8.02	3.61	1.64
	1983	8.79	3.40	2.19
	1984	7.19	3.45	0.64
	1985	0.58	4.21	4.79
	1986	0.01	4.12	4.13
	1987	0.48	3.25	3.72
	1988	0.11	2.18	2.28
	1989	5.94	2.68	8.62
	1990	4.31	2.13	6.45
Oregon	1980	9.20	1.84	11.04
	1981	8.99	1.82	0.81
	1982	0.14	2.76	2.86
	1983	8.89	2.60	1.49
	1984	7.47	1.93	9.40
	1985	8.02	2.10	0.14
	1986	8.02	1.61	9.63
	1987	7.15	1.84	8.98
	1988	8.19	1.88	0.06
	1989	7.40	1.38	8.78
	1990	7.01	1.27	8.28

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
Pennsylvania	1980	8.91	2.25	11.16
	1981	9.56	2.46	2.02
	1982	0.87	2.02	2.89
	1983	0.37	2.02	2.39
	1984	0.53	2.09	2.62
	1985	9.36	2.37	1.73
	1986	6.75	1.83	8.57
	1987	7.72	2.23	9.96
	1988	6.61	2.07	8.67
	1989	4.60	1.84	6.44
	1990	4.68	2.15	6.83
Puerto Rico	1980	8.46	1.74	10.20
	1981	9.71	2.07	1.78
Rhode Island	1980	13.50	2.93	16.43
	1981	0.50	2.17	2.67
	1982	8.90	2.48	1.37
	1983	8.90	2.56	1.46
	1984	7.08	2.01	9.09
	1985	8.00	1.47	9.47
	1986	5.93	2.78	8.71
	1987	4.52	3.60	8.12
	1988	5.78	3.30	9.08
	1989	6.91	3.11	0.02
	1990	3.11	2.39	5.50
South Carolina	1980	10.48	2.15	12.63
	1981	9.03	2.33	1.35
	1982	9.57	2.10	1.67
	1983	8.11	2.90	1.01
	1984	0.61	3.68	4.29
	1985	1.86	3.48	5.34
	1986	1.66	2.93	4.59
	1987	0.23	4.09	4.27
	1988	0.06	3.62	3.69
	1989	5.86	3.27	9.13
	1990	5.71	2.35	8.06

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
South Dakota	1980	9.19	1.44	10.63
	1981	8.27	1.70	9.97
	1982	0.64	1.50	2.13
	1983	7.84	1.10	8.94
	1984	3.59	0.94	4.53
	1985	3.15	0.88	4.03
	1986	3.51	0.82	4.34
	1987	2.53	0.79	3.31
	1988	3.28	1.17	4.45
	1989	3.92	1.05	4.97
	1990	3.86	1.00	4.85
Tennessee	1980	10.41	2.28	12.69
	1981	1.31	2.48	3.79
	1982	0.04	2.30	2.33
	1983	6.99	1.94	8.93
	1984	6.08	2.04	8.12
	1985	6.39	1.41	7.80
	1986	6.03	2.38	8.41
	1987	8.51	2.73	1.24
	1988	7.95	4.17	2.12
	1989	4.63	4.15	8.78
	1990	6.55	1.74	8.28
Texas	1980	7.65	1.75	9.40
	1981	9.28	2.14	1.41
	1982	9.69	2.24	1.93
	1983	7.58	2.40	9.98
	1984	9.60	1.67	1.27
	1985	0.38	1.97	2.35
	1986	8.91	3.05	1.97
	1987	7.89	2.16	0.04
	1988	7.89	2.36	0.25
	1989	7.12	2.12	9.24
	1990	8.41	2.05	0.46

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
Utah	1980	10.86	2.22	13.08
	1981	7.89	3.59	1.48
	1982	9.79	3.57	3.36
	1983	3.33	2.52	5.85
	1984	1.37	2.77	4.14
	1985	7.26	1.72	8.98
	1986	4.79	0.88	5.67
	1987	4.23	1.52	5.74
	1988	6.54	1.68	8.22
	1989	5.79	1.81	7.60
	1990	5.11	1.45	6.56
Vermont	1980	10.40	1.91	12.31
	1981	9.23	1.72	0.95
	1982	0.26	2.32	2.58
	1983	6.71	2.00	8.71
	1984	9.53	1.71	1.24
	1985	7.73	1.44	9.17
	1986	6.89	2.07	8.96
	1987	6.64	1.56	8.20
	1988	7.35	1.68	9.03
	1989	9.10	1.94	1.04
	1990	6.81	1.15	7.96
Virgin Islands	1980	12.45	2.60	15.05
	1981	0.44	3.82	4.26
	1982	1.40	2.03	3.43
	1983	4.77	4.79	9.56
	1984	2.12	2.24	4.36
	1985	9.73	1.87	1.60
	1986	9.15	2.25	1.40
	1987	5.87	3.00	8.87
	1988	5.77	1.35	7.12
	1989	4.46	2.19	6.64
	1990	5.24	3.93	9.17

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
Virginia	1980	7.69	1.85	9.54
	1981	7.50	2.02	9.53
	1982	8.20	2.39	0.59
	1983	6.46	2.14	8.60
	1984	8.04	2.30	0.34
	1985	6.62	2.57	9.19
	1986	5.84	1.99	7.83
	1987	6.27	1.77	8.04
	1988	5.59	1.86	7.45
	1989	6.51	1.93	8.45
	1990	4.68	2.28	6.96
Washington	1980	8.10	1.30	9.40
	1981	8.49	1.53	0.01
	1982	9.82	1.70	1.52
	1983	9.94	1.60	1.54
	1984	8.81	2.70	1.51
	1985	9.10	2.36	1.46
	1986	9.50	1.87	1.38
	1987	8.10	2.25	0.34
	1988	8.14	2.13	0.27
	1989	7.39	2.02	9.41
	1990	8.21	1.87	0.08
West Virginia	1980	7.40	1.70	9.10
	1981	9.09	2.57	1.66
	1982	9.03	1.99	1.01
	1983	5.52	1.85	7.37
	1984	6.94	1.53	8.47
	1985	6.86	1.85	8.71
	1986	6.88	1.59	8.47
	1987	8.10	1.58	9.68
	1988	8.81	1.57	0.38
	1989	8.97	2.50	1.47
	1990	9.12	2.19	1.31

State	Year	Overpayment error rate	Underpayment error rate	Combined payment error rate
Wisconsin	1980	9.61	3.22	12.83
	1981	0.24	3.47	3.72
	1982	1.40	4.32	5.73
	1983	8.27	3.38	1.65
	1984	9.60	3.20	2.80
	1985	8.00	2.61	0.61
	1986	9.96	3.06	3.02
	1987	8.41	3.24	1.65
	1988	7.83	3.40	1.22
	1989	8.01	2.85	0.86
	1990	8.08	2.75	0.83
Wyoming	1980	10.42	1.02	11.44
	1981	2.36	1.16	3.52
	1982	8.72	1.25	9.97
	1983	9.88	1.98	1.86
	1984	9.07	2.69	1.76
	1985	6.78	1.83	8.61
	1986	6.21	1.88	8.09
	1987	5.80	2.03	7.83
	1988	4.54	3.10	7.64
	1989	5.28	2.62	7.90
	1990	5.57	2.23	7.80
U.S. Average	1980	9.51	2.35	11.86
	1981	9.90	2.50	2.38
	1982	9.54	2.44	1.96
	1983	8.32	2.45	0.74
	1984	8.59	2.32	0.89
	1985	8.27	2.24	0.48
	1986	8.09	2.27	0.39
	1987	7.58	2.63	0.25
	1988	7.41	2.53	9.94
	1989	7.27	2.54	9.80
	1990	7.34	2.46	9.80