

GAO

Report to the Ranking Minority
Member, Subcommittee on Domestic
Marketing, Consumer Relations, and
Nutrition, Committee on Agriculture,
House of Representatives

January 1990

FOOD STAMP PROGRAM

A Demographic Analysis of Participation and Nonparticipation





United States
General Accounting Office
Washington, D.C. 20548

Program Evaluation and
Methodology Division

B-227721

January 19, 1990

The Honorable Bill Emerson
Ranking Minority Member
Subcommittee on Domestic Marketing,
Consumer Relations, and Nutrition
Committee on Agriculture
House of Representatives

Dear Mr. Emerson:

On April 30, 1986, you asked us to examine the reasons why some households that meet the eligibility criteria for the Food Stamp program do not receive benefits. This report is the third and final in a series of reports prepared in response to your request. Our July 1988 and December 1988 reports to you discussed Food Stamp program operations, state program variations, results of prior research on reasons for nonparticipation, and responses to a few broad questions on reasons for nonparticipation as cited in the 1980 and 1987 Panel Study of Income Dynamics (PSID) surveys of nationally representative samples of families.

This report presents an in-depth analysis of participation across various demographic factors and reasons for not participating in the program reported by those eligible for benefits.

As we arranged with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution of it until 30 days from the date of the report. At that time, copies will be sent to the Secretary of the Department of Agriculture and the Administrator of the Food and Nutrition Service (FNS). We will also make copies available to interested organizations, as appropriate, and to others upon request.

If you have any questions or would like additional information, please call me at (202) 275-1854 or Dr. Michael J. Wargo, Director of Program Evaluation in Physical Systems Areas, at (202) 275-3092.

Sincerely yours,

Eleanor Chelimsky
Assistant Comptroller General

Results in Brief

GAO found that in 1987 43.8 percent of eligible households participated in the Food Stamp program, while 56.2 percent did not. The household characteristic most closely associated with high rates of Food Stamp program participation was found to be participation in other welfare programs. Categories of households associated with low rates of food stamp receipt included households receiving Social Security benefits, those headed by an elderly person, and those headed by both white and nonwhite single men.

Of the three summary categories of reasons given for nonparticipation in the Food Stamp program—(1) a lack of desire for benefits, (2) a lack of information about the program, and (3) problems with the program or lack of access to it—the two most frequently cited categories of reasons for nonparticipation were lack of desire for program benefits and lack of information about the program. Although it was the least frequently cited response, the program or access problems category was also cited by a sizeable group of respondents.

Principal Findings

GAO found that 87 percent of households participating in other welfare programs (for example, the Aid to Families with Dependent Children program) also participate in the Food Stamp program. Other households having a high likelihood of participation were those headed by a nonwhite single female (75 percent participation) and those receiving Supplemental Security Income program benefits (62 percent participation). The likelihood of participation in the Food Stamp program increases greatly with each additional child present in the household. (The likelihood of participation rises 67 percent for each additional child.) Households with low rates of participation in the Food Stamp program were those headed by an elderly individual (34 percent participation), those receiving Social Security benefits (31 percent participation), and those headed by a single male, both white (17 percent participation) and nonwhite (30 percent participation).

When eligible nonparticipants were asked why they did not participate, 38.2 percent of the households reported a lack of desire for benefits, 36.8 percent responded that they lacked information about the Food Stamp program, and 25.0 percent indicated that program or access problems prevented their participation. These reasons were related to particular demographic, socioeconomic, or other characteristics of the households. Those that reported a lack of desire for food stamp benefits as their predominant reason for not participating were households in which the head was a white individual (married, widowed, divorced, or

Agency Comments

The Department of Agriculture's Food and Nutrition Service fully agreed with GAO's recommendation to the Secretary of Agriculture but had one major concern about the report. In this report, as in our two earlier ones, the Department of Agriculture took exception to GAO's use of the Panel Study of Income Dynamics data base. The Department believes that the Panel Study has overestimated the extent of nonparticipation in the Food Stamp program. GAO thus continues to have a fundamental difference with the Department on this point, but this disagreement is irrelevant to this report, which focuses not on the magnitude of the nonparticipation problem but on the reasons for it.

Table 3.2 : The Probability of a Food-Stamp-Eligible Household Citing a Particular Reason for Nonparticipation as the Predominant Reason	18
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Abbreviations

AFDC	Aid to Families With Dependent Children
CBO	Congressional Budget Office
FNS	Food and Nutrition Service
GAO	General Accounting Office
PSID	Panel Study of Income Dynamics
SIPP	Survey of Income and Program Participation
SSI	Supplemental Security Income

Objectives, Scope, and Methodology

The objective of this report is to address the following two questions:

1. What demographic characteristics or factors are associated with Food Stamp program participation?
2. What reasons do food-stamp-eligible households give for not participating in the program?

The scope of our work described in this report was confined to data gathered in the 1987 PSID—a University of Michigan survey that collected data from a nationally representative sample of 7,061 families.² GAO contracted with the University of Michigan to collect some additional data on Food Stamp program participation as part of their PSID data collection.

Our methodology consisted of determining the frequency of responses to the survey questions and determining regression equations to estimate the strength of some of the relationships among variables. First, we identified families that we estimated to be eligible to participate in the Food Stamp program. Certain characteristics were identified for each household surveyed, including the age (elderly or not), sex (male or female) and race (white or nonwhite) of the head of the household, marital status of the head of the household (single, widowed, divorced, separated, or married), the highest educational attainment of the head of the household or the spouse, the number of children in the household, gross annual income of the household, and whether the household participated in Social Security or welfare programs such as Aid to Families With Dependent Children (AFDC) and Supplemental Security Income (SSI). A discussion of the selection of household characteristics and how they were treated in the analysis is included in appendix II.³

²Since PSID cannot be used to establish Food Stamp program eligibility precisely (in fact, no existing national data base can), we estimated eligibility. We applied two screening tests to identify households eligible to receive food stamps. First, we excluded some households that were not in the contiguous United States, had implausible responses to PSID questions, had a change in the head of the household during the year in question, or contained a household member other than the head of the household or spouse who earned at least \$5,000 in annual income. Second, we excluded households whose income exceeded either of two income tests (food stamp gross and net income thresholds adjusted for household size) or whose assets based on type of household (elderly or nonelderly) exceeded asset limits. For more information on our approach to estimating households eligible for participation and on PSID and its limitations, see our report entitled *Food Stamps: Reasons for Nonparticipation*, GAO/PEMD-89-53R (Washington, D.C.: December 1988), especially section 9 and appendix I.

³The category for nonwhites was made up of a combination of blacks, Hispanics, Asians, and others. We treated SSI participation separately from participation in general assistance, public assistance, AFDC, and other welfare programs. No households in our sample were in both SSI and other welfare programs.

Participation in the Food Stamp Program

Not everyone eligible for food stamps receives program benefits. Our report entitled Food Stamps: Reasons for Nonparticipation (GAO/PEMD-89-5BR) noted that 43.8 percent of the households estimated by PSID as eligible to receive food stamps participated in the Food Stamp program at some time during 1986, while 56.2 percent did not. As stated in this earlier report, these participation rates should be considered approximate, given our use of an annual definition of eligibility.¹ The same is true for this report. However, although these estimates, like all estimates, cannot be considered exact, they are close to other estimates, and they are a prerequisite for answering the congressional question about the reasons for nonparticipation. That is, the estimates are necessary for grouping eligible households and for determining why they do or do not participate in the Food Stamp program. In this chapter, we focus on the household characteristics that are associated with participation.

Likelihood of Participation

In order to estimate the likelihood of participation of various categories of households, we examined the probabilities of participation for each household characteristic. (See tables 2.1 and 2.2.) The probabilities in table 2.1. were derived from the frequency of participation reported by households. For example, the probability of participation for any specific household category, such as the elderly, was calculated by dividing the weighted estimated number of participants by the weighted estimated number of eligible households. In table 2.2, the likelihood of participation was derived from a mathematical model (logistic regression) that predicts the increase in the likelihood of participation associated with a one unit increase in the value of the response for each household category.² For example, the model predicted the increase in the likelihood (that is, the odds) of participation in the Food Stamp program associated with a one unit increase in the number of children in the household.

¹Food Stamp program participation is typically reported on a monthly basis; no data are collected for the number of eligible households or individuals. Since the participation rate for households is the number of participating households divided by the number of eligible households, calculating participation rates requires an estimate of the number of households (or individuals) participating in the Food Stamp program and an estimate of the number of households (or individuals) eligible to participate. In our calculations, we derived the number of participating households from the PSID respondents' answers to the question of whether they participated in the Food Stamp program over the previous year, not from FNS administrative data. Because the data in PSID are all reported on a yearly basis, we had to estimate eligibility by multiplying monthly administrative eligibility standards (such as income levels) by 12, to assure data comparability.

²See appendix II for a description of the logistic regression model.

the Food Stamp program, and all these associations were statistically significant.³

The findings in tables 2.1 and 2.2 were generally consistent with our expectations, based on information from previous reports and from experts in this area. First and foremost, participation in other welfare programs had the strongest association with Food Stamp program participation: 87 of every 100 households already in some other welfare program participated in the Food Stamp program. The program that households in this category participated in most often was Aid to Families with Dependent Children (AFDC). Historically, studies have found a high correlation between participation in the Food Stamp and AFDC programs. This correlation was confirmed by our results.

The relationship between SSI participation and Food Stamp program participation was also quite strong, with 62 out of every 100 households that receive SSI also participating in the Food Stamp program.

The elderly and those receiving Social Security benefits, when they were eligible, participated in the Food Stamp program at fairly low rates compared to those of many other categories in table 2.1. This was certainly not a surprising result. Previous studies have cited evidence that elderly individuals generally tend to participate in the Food Stamp program and other welfare programs much less frequently than the nonelderly.

When we examined the probability of participation for different household compositions, we found that in three categories of households—those headed by single males, by single females, and by widowed, divorced, or separated individuals—the participation of nonwhites was greater than that for whites. The highest probability of participation for a specific household composition was that for nonwhite single females. (See table 2.1.)

Among the different household groups, the categories with the lowest probability of participation were single men, both white and nonwhite. Historically, single men have not had high participation rates in the Food Stamp program. Our results confirmed this finding.

³Chi-square tests were used to test the significance of crosstabulated variables such as program participation (yes or no) and household recipient of other welfare benefits (yes or no). All statistical tests were performed using the standard chi-square statistic with a design effect of 2.0 to take into account the nonsimple random sample design of PSID.

Reasons for Nonparticipation

There are many reasons why food-stamp-eligible households do not receive benefits. These reasons are the central focus of this chapter. But before we study those reasons, it is important to understand how PSID elicited responses from survey respondents. PSID first queried the heads of households on whether they were Food Stamp program participants. Nonparticipant respondents were then asked if they thought their households were eligible for Food Stamp benefits. About forty-nine percent of the nonparticipants responded that they thought they were eligible for benefits and 50.7 percent that they were ineligible. Nonparticipants who believed they were ineligible were asked why they thought they were ineligible. Nonparticipants who thought they were or might be eligible were asked whether they had tried to get food stamps and, if so, why they had not received benefits.

Table 3.1 segments the reasons cited by food-stamp-eligible but nonparticipating households into three major categories of response:

- An expressed lack of desire for food stamps. This category is composed of eligible households that said they did not need food stamp benefits or said that their personal attitude about receiving welfare benefits prevented them from participating in the program.
- Lack of, or incorrect, information about the Food Stamp program. This category is composed of eligible households that thought their income or assets were too high to make them eligible for benefits, those who thought they were ineligible for some reason other than income or assets, or those who did not know how to apply for benefits.
- Perceived, or actual, access or program problems—that is, problems with access to the Food Stamp program or with the administration of the program. This category is composed of eligible households that cited negative perceptions about program administration, experienced administrative “hassles,” were told they were ineligible by welfare officials, or perceived they had or actually had experienced physical access problems while attempting to secure benefits.

Reasons Cited for Not Participating in the Food Stamp Program, by Type of Household

As we did in chapter 2 in our discussion of the different participation rates of different types of households, we examined the reasons for nonparticipation in the Food Stamp program according to type of household.

Tables 3.2 and 3.3 indicate the proportion of households that cited particular reasons for nonparticipation. These tables present the main reasons for nonparticipation reported by selected categories of households. The probabilities presented in table 3.2 were derived by dividing the weighted frequency of each response as to reason for nonparticipation—for example, program or access problems—by the weighted number of all respondents in each household category—for example, households receiving other welfare benefits. Table 3.2 lists the most frequently reported reason for nonparticipation for each household category and the probability of that reason being cited. For example, in table 3.2, 47 out of every 100 food-stamp-eligible and nonparticipating households that received other welfare benefits cited program or access problems as their primary reason for not receiving food stamps.

Table 3.3 presents the likelihood of participation in the Food Stamp program for the same three household categories as were presented in table 2.2 (that is, income, education, and number of children). Similarly to table 2.2, table 3.3 presents the increase in the likelihood of citing a reason for nonparticipation—for example, program or access problems—associated with a unit increase in the household characteristic being considered—for example, the number of children. We used multinomial logistic regression to estimate the values presented in table 3.3.¹

¹See appendix II for a discussion of multinomial logistic regression.

Lack of Desire for Benefits

The highest probability of a lack of desire for Food Stamp benefits being reported as the main reason for not receiving food stamps was associated with households receiving Social Security benefits, those containing elderly eligibles, and all groups of white households that contained currently or formerly married individuals. (See table 3.2.) The likelihood of a lack of desire for benefits being cited was also related to the education level of the head of the household. That is, with each increase in the head of the household's education level, there was a concomitant increase in the likelihood of a lack of desire for benefits being reported. (See table 3.3.)

Lack of Information

The groups most likely to cite a lack of information about the Food Stamp program as their predominant reason for nonparticipation included most categories of households headed by single individuals—that is, households headed by white single men and women and those households headed by nonwhite single females. (See table 3.2.)

Program or Access Problems

As indicated in table 3.2, the groups most likely to report problems (real or perceived) with the Food Stamp program or access problems as their major reason for nonparticipation were households that also participated in ssi or other welfare programs; households headed by nonwhite widowed, divorced, or separated individuals; nonwhite single males; and households containing nonwhite married couples. Further, as indicated in table 3.3, as the number of children or the amount of income increases, households become increasingly likely to consider program or access problems as the main reason for nonparticipation.

Except for households headed by single females, nonwhite households were more likely to report program or access problems as their predominant reason for not participating in the Food Stamp program than were white households.

As a group, those participating in other welfare programs (ssi and others) were more likely than other groups to cite program or access problems as their predominant reason for not participating in the Food Stamp program. It should be noted, however, that this group had high rates of participation. Substantial increases in the participation rates of these groups is unlikely, even if program or access problems were minimized, since some of these groups already have high participation rates. (See chapter 2.)

Summary, Recommendation, and Agency Comments and Our Response

Summary

Participation

First and foremost, participation in other welfare programs or the Supplemental Security Income (SSI) program was the dominant household characteristic associated with Food Stamp program participation. The participation rate of households headed by a nonwhite single female was also high relative to other households. As the number of children in the household increased, there was a sizeable corresponding increase in the likelihood of participation in the Food Stamp program by these households. Households that were associated with low Food Stamp program participation included elderly households, households receiving Social Security benefits, and households headed by single men.

Reasons for Nonparticipation

We grouped the reasons that eligible but nonparticipating households reported for not participating in the Food Stamp program into three categories: (1) a perceived lack of desire for benefits (38.2 percent of the households), (2) a lack of information about the Food Stamp program (36.8 percent of the households), and (3) problems with the program or access to it (25.0 percent of the households).

Households that cited a lack of desire for benefits as the predominant reason for nonparticipation were those in which the head of the household was elderly, those receiving Social Security benefits, and white households in which the head of the household currently was or formerly had been married. The level of education was also related to a lack of desire for benefits. As the level of education increased, households were more likely to report a lack of desire for benefits as their predominant reason for not receiving food stamps.

We found that 36.8 percent of the eligible but not participating households represented in the Panel Study of Income Dynamics (PSID) sample reported a lack of information about the program as their principal reason for nonparticipation. Households headed by single individuals generally cited a lack of information about the Food Stamp program as their predominant reason for nonparticipation.

Program and access problems was the least often reported category of reasons for nonparticipation in the Food Stamp program (25.0 percent). Nonetheless, that category included one quarter of the eligible nonparticipants. Groups most frequently citing this reason for nonparticipation

Recommendation to the Secretary of Agriculture

In view of the fact that outreach efforts may be resumed under the Hunger Prevention Act, we recommend that the Secretary of Agriculture direct the Administrator of the Food and Nutrition Service to encourage the states to target outreach to those groups that would most benefit from it and to tailor the type of outreach to the needs and characteristics of those specific groups. Effective targeting and tailoring of outreach efforts should maximize the returns on investments in outreach by the states and the federal government.

Agency Comments and Our Response

The Department of Agriculture's Food and Nutrition Service (FNS) fully agreed with our recommendation to the Secretary of Agriculture but had, in our estimation, one major and several minor concerns with our report. We will address the major point here and will address the others in appendix I.

This is the third in a series of reports that we have produced using the PSID data base. In this report, as in the other two, the Department of Agriculture took exception to our use of the PSID data base. Agriculture believes that PSID overestimates the extent of nonparticipation in the Food Stamp program. Agriculture also believes that PSID underreports income and program participation and further believes that underreporting of income results in overestimating eligibility. That combination of underreporting of participation and overestimation of eligibility results, according to Agriculture, in our overestimating the nonparticipation rate (arrived at by dividing participants by eligibles).

Our response to these comments remains the same as our earlier response to similar Department of Agriculture comments to our first two reports in this series. We continue to have a fundamental difference with Agriculture on the validity and usefulness of the PSID data for our purposes. While the focus of this and earlier reports is on the reasons for nonparticipation in the Food Stamp program, Agriculture's major objection is focused on our estimates of participation rates. We contracted with the University of Michigan to collect data on reasons for nonparticipation in the Food Stamp program using the PSID data base, since only that survey had previously collected information from heads of households about why they did not participate in the Food Stamp program. This is the primary reason why we selected and used these data.

Sample)”, as was done by Agriculture.³ In selecting the PSID data base for our study, we selected the only national data base that permits estimation of participation rates from one source, and that reports reasons for nonparticipation.

Agriculture also cites an estimate of program participation in the recent CBO report as evidence that the figures in our report are incorrect. However, CBO produces two different estimates. By combining SIPP and the Department of Agriculture’s Quality Control data, CBO arrives at a participation rate of 58 percent. However, using only SIPP data, CBO estimates a 41 percent participation rate. As mentioned earlier, CBO considers the estimate produced solely from SIPP data to be the more accurate of the two. They conclude that the best estimate of what percent of the eligible population participates in the Food Stamp program may lie between 41 and 58 percent. Our estimate of 43.8 percent for households falls within the CBO range, while the Department of Agriculture’s figure of 60 percent is outside that range. The participation rate we estimated from the PSID data is also very close to that historically reported in the literature.⁴

In the final analysis, regardless of which estimate is used, the fact remains that there is a sizeable number of households eligible for Food Stamp benefits who do not receive them. That is why using PSID to examine the reasons for nonparticipation is so critical.

³CBO, The Food Stamp Program: Eligibility and Participation (Washington, D.C.: November 1988), p. vi.

⁴See Food Stamps: Examination of Program Data and Analysis of Nonparticipation, GAO/PEMD-88-21 (Washington, D.C.: July 5, 1988).

Appendix I
Comments From the Department
of Agriculture

Ms. Eleanor Chelinsky

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The report also fails to address the consequences of these limitations for the analysis. Given the rough approximation of eligibility and the severe problems of underreported income and program participation, there is a reasonably high probability that some of those thought to be eligible were, in fact, ineligible; and some of those thought to be nonparticipants were in fact, participating. Such misclassifications can easily distort the interpretation of reasons given for nonparticipation.

Finally, the report is too casual in its presentation of findings. The GAO fails to report important details on the statistical models used in its analyses. These are essential in interpreting the results. In addition, the language used to describe the demographic characteristics of the nonparticipating households throughout the report changes too often. At some points GAO ascribes characteristics (elderly, receipt of social security income, "single") to the household head and at others to the total household or at least one household member. Similarly it appears that the group described as "households headed by singles" includes single working age adults, single elderly persons living alone, and never married mothers with children (while excluding widowed, divorced, or separated mothers with children). This is extremely confusing and particularly problematic if the conclusions drawn have the potential for shaping national policy.

Despite our concern about the quality of this work we agree, in principle, with the recommendation that FNS should encourage States to target and tailor their program informational activities (outreach) to those groups which would benefit most. We encourage States and localities to undertake needs assessments and consider the tailoring of these activities before committing funds to additional program informational activities. Information on any subgroups targeted and the methods of disseminating program information will be provided to FNS as a part of the annual budget planning process.

Thank you for giving us the opportunity to comment on this report. Additional specific comments are enclosed which we hope you will consider in preparing the report for wider distribution. Should you have any questions, please do not hesitate to contact my staff.

Sincerely,


G. SCOTT DUNN
Acting Administrator

Enclosure

See comment 1.

**Appendix I
Comments From the Department
of Agriculture**

See comment 4.

- o Too often, the conclusions drawn from the statistics presented are implausible or unsubstantiated: For example:

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- On page 11 of the draft report: "As household income rises it approaches the level at which the household is no longer eligible for benefits. The closer the household comes to that limit, the more likely the head of the household is to believe, either correctly or incorrectly, that the household is no longer eligible for benefits."

It isn't clear from the report if this is a result of the analysis (i.e., tabulations showing the frequency of perceived ineligibility increases with income), or if this is speculation. Just as likely a reason is that participation declines because perceived need for assistance declines. In addition, given the imprecision of the eligibility estimation and the extent of income underreporting in the survey, the model may be picking up spurious results from truly ineligible households.

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- On page 21 of the draft report: "Single individuals in all likelihood are much younger than the population of respondents to the PSID in general and, thus, may be new to the social setting and not particularly well linked to the information system."

Single individuals may not be all that young since many single elderly persons are eligible for and receive food stamp benefits. Rather than speculating about the average age of singles, GAO has the data to calculate their age. In addition, it is unclear how GAO is defining the term "singles." A common interpretation is single individuals, i.e., persons who live alone. However, the draft report repeatedly refers to "households headed by singles" (pages iii, iv, v, vi, 12, 20, 21, 25, 27, 29) leaving ambiguous whether or not other persons--especially dependent children of never-married mothers--are present in the household. If so, this group includes a rather odd mixture of single, working-age adults; single elderly living alone; and never-married single mothers with children. Widowed, divorced, and separated mothers (and fathers) with children are included in still another category. It is not immediately clear how outreach could be targeted effectively to such a mixed group.

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- On page 22 of the draft report: "This high response to program/access problems may be explained, by the need for additional documentation for each child, thus increasing the absolute amount of paperwork required. Also, it is likely that several sessions may be necessary before all the required documentation is provided and that the length of sessions will increase as the number of children for whom documentation is required increases."

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**Appendix I
Comments From the Department
of Agriculture**

The analysis actually uses an annualized value for the income limits by multiplying the FSP monthly limits by 12. As noted above, the use of annual income is an inaccurate proxy for the rules actually used by the Food Stamp Program.

Now pages 9 and 10.

- o pages 3-4: "Associated with each household surveyed are characteristics including the age, ...and whether the household participated in welfare programs such as AFDC, Supplemental Security (SSI), or Social Security."

See comment 8.

Social Security is not usually considered a welfare program, but rather a social insurance program.

Now page 12.

- o page 8: Table 2.1: Probability of Participation by Category and Table 2.2: Change in Probability of Participation based on Number of Children, Income, and Education

See comment 9.

The draft report offers no description or documentation of the source of these estimates. Are these simple counts from the data base, or are they predicted values from a probability model? The marginal change for number of children in Table 2.2 of 67 percent seems extraordinarily large.

Now page 13.

- o page 10: "It is well known that single men do not have high participation rates in most welfare programs."

See comment 10.

Single men are not eligible for most welfare programs, so it is unclear without reference to specific programs just what conclusion one should draw.

Now page 15.

- o page 14: The lead in to the description of the second category of reasons cited for nonparticipation implies that incorrect information was a reason cited. Our review of the PSID survey results, as summarized in the December 1988 GAO report, indicates that no such response was given.

See comment 11.

Now page 16.

- o page 15: Table 3.1: Distribution of Reasons that Food Stamp Eligible Households Cite for Nonparticipation in the Program

-- To the extent that household reports of income are underreported, households incorrectly modeled as eligible could correctly respond that they "thought income or assets too high."

See comment 12.

-- The table shows that 9.3 percent of the households, simulated to be eligible by GAO, indicated that they were told they were ineligible by welfare officials. Given the intra-year variation in income, resources and other circumstances not captured by the PSID, one should not infer that everyone who was told they were ineligible by welfare officials was necessarily eligible at the time of the denial. The application of eligibility criteria of these officials is much more accurate than a simulation of eligibility from the PSID. It is likely that many of these households were properly denied benefits but continued to believe they were ineligible even though their circumstances changed.

GAO Comments

The following are GAO's comments on the Department of Agriculture's letter dated June 1989.

1. We disagree with the comment of the Food and Nutrition Service (FNS) that we were too casual in presenting our findings. First, concerning the lack of details on the statistical models, we provide an overview of our methodology in chapter 1 and reference appendix II, which provides additional details on how we chose the variables to include in our analyses and how we analyzed the data from PSID. However, as indicated by FNS, we did not provide further details on our calculations of probabilities of participation and reasons for nonparticipation. Based on FNS's comment, we have now included a discussion of this modeling in appendix II.

Second, to clarify our use of the term "head of the household," we have defined this term more carefully in chapter 1. In all cases, the respondent for the household was the person identified as "the head of the household." Some questions, however, did arise about characteristics of other household members. For example, a household is defined as elderly if any member of the household is aged 60 or older.

2. We responded to the issue of underreporting on pages 23 and 24 of the text. However, although FNS takes issue with our use of PSID annual income information to estimate eligibility (on the grounds that there may be sizeable income changes occurring in households over the course of the year), we stand by our method. While income levels of PSID sample households may change during the course of the year, they would have to change enough to move the household's annual income above 12 times the monthly eligibility level. This is unlikely since most of the households in our sample reported rather stable incomes over the year, and those with major variations—such as those caused by changes in the head of the household—were excluded from our calculations. We agree with FNS that information about household deductible expenses is extremely limited and assets are not reported in PSID. We would only point out that this same limitation exists for the SIPP data base that is used extensively by the Department of Agriculture.

3. In our discussions with CBO analysts and review of their data, we ascertained that their estimates for participation (and nonparticipation) were very similar to ours when they used only SIPP data. (See page 25 of the text.) However, when they combined Department of Agriculture quality control data (to estimate the number of participants) and SIPP data (to estimate the number of eligibles), the CBO estimates diverged

10. Our statement should have read that single men have historically participated in the Food Stamp program at low rates. This statement has been corrected in the text.

11. The lead-in is our categorization, which we feel adequately describes the responses that follow.

12. Neither FNS nor we know exactly how many of those applying for benefits who were told they were ineligible for the program were actually eligible. We discussed this problem several times with FNS officials, and we agreed each time that some of the applicants were probably eligible and others not.

13. We made the change on the basis of FNS's comment.

14. The base used in table 3.2 is clearly stated and thus not misleading. Our base is those households estimated as eligible for food stamps but not receiving them, not those eligible for food stamps and receiving them.

15. Additional explanation has been added to the text of this report to enable the reader to understand this table better.

16. Details of this model have been added to appendix II.

17. Our bibliography cites ten—rather than two—other GAO reports and cites six Department of Agriculture reports. The final CBO study on Food Stamp program eligibility and participation is also cited in our bibliography. Again, since the focus of our report is on reasons for nonparticipation in the Food Stamp program—rather than on participation rates—we do not believe that further discussion of either the Department of Agriculture or CBO estimates is warranted.

participation or reasons for nonparticipation.³ Using the prior research as a guide, we identified variables in the PSID data base that would likely be related to our dependent variables.

Based on prior research, we selected the following household characteristics for our analysis:

- recipient of other welfare benefits, coded 0 for household receiving no public assistance, welfare, or AFDC, and coded 1 for household receiving either AFDC or other public welfare (24 percent of our sample of eligible households received public welfare or AFDC);
- recipient of Supplemental Security Income benefits, coded 0 for not receiving Supplemental Security Income benefits and coded 1 otherwise (16 percent of our sample of eligible households received SSI);
- recipient of Social Security benefits, coded 0 for households not receiving Social Security benefits and coded 1 otherwise (36 percent of our sample of eligible households received Social Security benefits);
- age, coded 0 (nonelderly) for no household member over 60 years of age and coded 1 (elderly) for households with at least one member over 60 (64 percent of our sample of eligible households was nonelderly);
- marital status and gender (a cluster of three binary variables), the first variable coded 1 for single males and coded 0 otherwise; the second coded 1 for single females and coded 0 otherwise; the third coded 1 for either widowed, divorced, or separated households and coded 0 otherwise—with the category coded all zeroes used for married couples (our sample of eligible households included 9 percent single males, 15 percent single females, 26 percent widows or widowers, 19 percent divorced persons, 8 percent separated persons, and 23 percent married couples);
- race, coded 0 for whites and coded 1 for nonwhites (our sample of eligible households included 36 percent nonwhites);
- number of children, the number of children in the household being a continuous variable (42 percent of our sample had at least one child in the household);
- income, a continuous variable coded as dollars per year (the average household income for the eligible household was approximately \$6,000);
- education, a continuous variable coded with maximum years of schooling for either the head of the household or the spouse (the average education attained by our sample of eligible households was approximately the eighth grade).

³These 19 factors are age, education, ethnicity, marital status, location, household size, race, sex, employment, food expenditures, income, public assistance, value of food stamps, attitude, information, transportation, health, mobility, and socioeconomic status. How we defined variables relative to households will be explained later in this appendix.

about the program, and program or access problems. Multinomial logistic regression may be viewed as the simultaneous estimation of the effects of the independent variables on specific comparisons of reasons for nonparticipation.

For example, consider the dichotomous variable participation status. The probability of participation—which is the weighted number of eligible participating households divided by the sum of the weighted number of eligible participating households and eligible households that do not participate in the program—may be expressed as a logistic function. In the logistic function, the probability of the dependent variable, in this case participation, is expressed as a function of one or more continuous independent variables, such as number of children in the household. The actual model for the probability of participation can be expressed as

$$\text{probability of participation} = e^{\frac{a+b_1x_1+\dots+b_px_p}{1+e^{(a+b_1x_1+\dots+b_px_p)}}$$

- where x_i = the independent variable,
- a = the intercept or constant term, and
- b_i = the estimate of the effect due to the independent variable
- e = natural logarithm

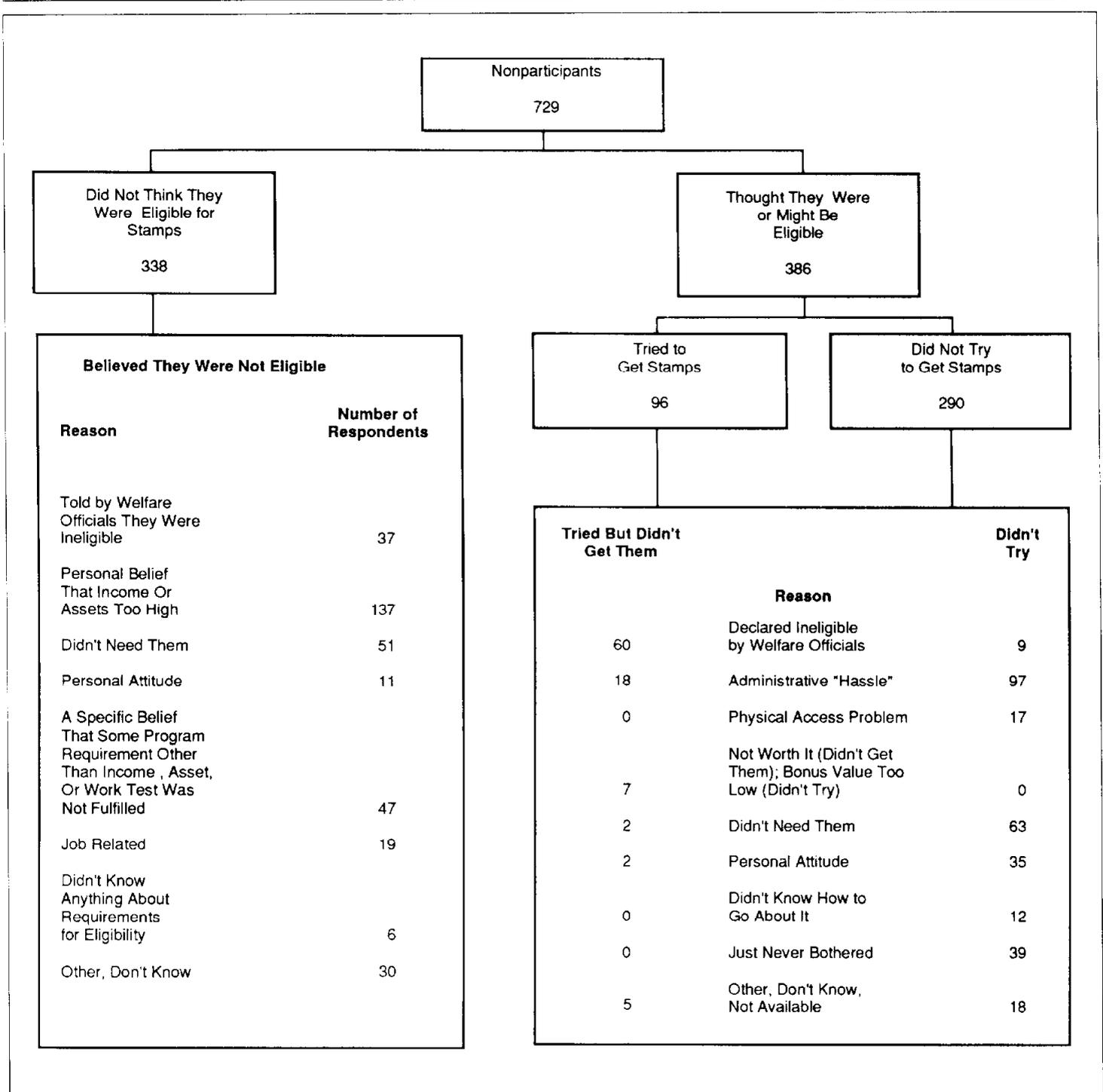
Rather than express the probability of participation, we can express the odds of participation, which would be the number of eligible participating households divided by the number of eligible nonparticipating households. This yields the following equation:

$$\text{odds of participation} = \frac{\text{probability of participation}}{1 - \text{probability of participation}}$$

By taking the natural logarithm of both sides of the equation, we can now express the logarithm of the odds of participation (known as the logit) as a linear function of the independent variables. The logarithm of the odds then takes the familiar additive form comprised of an effect due to the weighted sum of the independent variables—such as the number of children—and an intercept. That is,

$$\text{logarithm (odds of participation)} = a+b_1x_1+\dots+b_px_p$$

Overall Reasons Why Households Did Not Participate in the Food Stamp Program in 1986



Source: GAO analysis

Bibliography

United States Department of Agriculture, Contract 53-32u4-0-194. n.p., 1984.

Carr, T. J., P. Doyle, and I. S. Lubitz. Turnover in the Food Stamp Program: A Preliminary Analysis. Washington, D.C.: Mathematica Policy Research, 1984.

Chou, Marilyn. "Special Report: The Politics of Hunger, Part II." Cereal Foods World, 29:4 (April 1984), pp. 249-50.

Claffey, B. A., et al. "The Food Stamp Expenditure Cap." Staff Report AGESS810106. National Economic Division, Economics and Statistics Service, U.S. Department of Agriculture, Washington, D.C., 1981.

Coe, Richard D. "A Longitudinal Analysis of Nonparticipation in the Food Stamp Program by Eligible Households." Discussion Paper 773-85. Institute for Research on Poverty, University of Wisconsin, 1985.

Coe, Richard D. "Nonparticipation in Welfare Programs by Eligible Households: The Case of the Food Stamp Program." Journal of Economic Issues, 27:4 (1983), pp. 1035-56.

Coe, Richard D. "Participation in the Food Stamp Program, 1979." In Greg Duncan and James N. Morgan (eds.). Five Thousand American Families—Patterns of Economic Progress, Vol. 10, Analyses of the First Thirteen Years of the Panel Study of Income Dynamics. Ann Arbor, Michigan: Institute for Social Research, 1983.

Congressional Budget Office. The Food Stamp Program: Eligibility and Participation. Final Report, Washington, D.C., 1988.

Cullinan, Paul, and Patricia Ruggles. "Is the Sensitivity of Federal Transfer Programs to Changing Economic Conditions Declining?" Presented at the Allied Social Sciences Association, New Orleans, Louisiana, December 1986.

Czajka, John L. Determinants of Participation in the Food Stamp Program: Spring 1979. Final Report, Washington, D.C.: Mathematica Policy Research, November 1981.

Domestic Policy Council Low-Income Opportunity Working Group. "Up From Dependency: A New National Public Assistance Strategy." Mimeo, Washington, D.C., December 1986.

Bibliography

President's Task Force on Food Assistance. Report of the President's Task Force on Food Assistance. Washington, D.C.: January 1984.

Public Voice for Food and Health Policy. Rising Poverty, Declining Health: The Nutritional Status of the Rural Poor. Washington, D.C.: Public Voice, February 1986.

Ranney, Christine Karen. "A Study of the Interdependent Food Stamp Program Participation and Food Demand Decisions." Ph.D. Thesis, Department of Agricultural Economics, University of California, Davis, 1983.

Ranney, Christine Karen, and John E. Kushman. "Cash Equivalence, Welfare Stigma and Food Stamps." Southern Economic Journal, 9:2 (April 1987), pp. 1011-27.

Rogers, Larry J. "Nonparticipation in Social Welfare Programs by Eligible Candidates." Master's Thesis, Department of Sociology, University of Central Arkansas, 1985.

Rungeling, B., and L. H. Smith. Factors Affecting Food Stamp Participation in the Rural South. University, Miss.: Center for Manpower Studies, University of Mississippi, January 1975.

Smallwood, David M., and James R. Blaylock. "Analysis of Food Stamp Program Participation and Food Expenditures." Western Journal of Economics, 10:1 (1986), pp. 41-54.

Sudman, S., and N. Bradburn. Response Effect in Surveys. Chicago, Ill.: Aldine, 1984.

U.S. Congress, Senate Committee on Agriculture, Nutrition, and Forestry. Food Stamp Program: History, Description, Issues and Options. Washington, D.C.: 1985

U.S. Department of Agriculture. Food Stamp Program Participation Rates. Final Report, Alexandria, Va., 1988.

U.S. Department of Agriculture. Food Stamp Program Participation Rates Among the Poverty Population, 1980-1987. Final Report, Alexandria, Va., 1988.

Bibliography

GAO. Quality Control Error Rates, GAO/RCED-85-98. Washington, D.C.: April 1985.

Urban Institute. The Effects of Legislative Changes in 1981 and 1982 on the Food Stamp Program, Vol. 1. Final Report to Congress, Washington, D.C.: 1985.

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Bibliography

U.S. Department of Agriculture. "Assets of Low Income Households: New Findings on Food Stamp Participants and Nonparticipants." Report to the Congress, Alexandria, Va., 1981.

U.S. Department of Agriculture. "Effect of the Food Stamp Program on Food Expenditures and the Nutritional Quality of Diets of Low-Income Households." Final Report, Alexandria, Va., 1977.

U.S. Department of Agriculture. The Federal Quality Control Validation Review Handbook. FNS Handbook 315. Alexandria, Va.: 1985.

U.S. Department of Agriculture. The Food Stamp Program Quality Control Review Handbook. FNS Handbook 310. Alexandria, Va.: 1986.

U.S. General Accounting Office (GAO). Food Stamps: Examination of Program Data and Analysis of Nonparticipation, GAO/PEMD-88-21. Washington, D.C.: July 1988.

GAO. Food Stamps: Reasons for Nonparticipation, GAO/PEMD-89-5BR. Washington, D.C.: December 1988.

GAO. Hunger Counties: Methodological Review of a Report by the Physician Task Force on Hunger, GAO/PEMD-86-7BR. Washington, D.C. : March 1986.

GAO. Benefit Overpayments: Recoveries Could Be Increased in the Food Stamp and AFDC Program, GAO/RCED-86-17. Washington, D.C.: March 1986.

GAO. Food Stamp Program: Evaluation of Improper Denials and Termination Error Rates, GAO/RCED-88-12. Washington, D.C.: October 1987.

GAO. Food Stamp Program: Restoration of Improperly Denied or Terminated Benefits, GAO/RCED-87-51. Washington, D.C.: October 1986.

GAO. Food Stamp Program: Refinements Needed to Improve Accuracy of Quality Control Error Rates, GAO/RCED-86-195. Washington, D.C.: September 1986.

GAO. Food Stamp Program: Statistical Validity of Agriculture's Payment Error-Rate Estimates, GAO/RCED-87-4. Washington, D.C.: October 1986.

GAO. Food Stamp Program: Trends in Program Applications, Participation, and Denials, GAO/RCED-87-80BR. Washington, D.C.: April 1987.

Bibliography

Epperson, J. E., et al. "The Determinants of Food Stamp Program Participation." Southern Journal of Agricultural Economics, December 1980, pp. 93-97.

Greenstein, Robert. "Why 10 Million Low Income Americans Do Not Receive Food Stamps—A Review of the Research Literature." Manuscript, Center on Budget and Policy Priorities, Washington, D.C., 1984.

Hollonbeck, Darrell, and James C. Ohls. "Participation Among the Elderly in the Food Stamp Program." The Gerontologist, 24:6 (1984), pp. 616-21.

Johnson, S. R., James A. Burt, and Karen J. Morgan. "The Food Stamp Program: Participation, Food Cost, and Diet Quality for Low-Income Households." Food Technology, 10:3 (1981), pp. 58-70.

Kim, Yong-Hee. "Participation Behavior of Food Stamp Eligible Households in Four States." Ph.D. Thesis, Department of Home Management and Housing, Ohio State University, 1983.

Lane, Sylvia, John Kushman, and Christine Ranney. "Food Stamp Program Participation: An Exploratory Analysis." Western Journal of Agricultural Economics, 8:1 (1983), pp. 13-26.

Long, S., Harold Beebout, and Felicity Skidmore. "Food Stamp Research: Results from the Income Survey Development Program and the Promise of the Survey on Income and Program Participation." Washington, D.C., 1986.

Michael, R.C., R. Barnes, and S. R. Zedlewski. "The Effects of Legislative Changes in 1981 and 1982 on the Food Stamp Program." The Urban Institute, Washington, D.C., 1985.

Phillips, Kathryn S. "Effects on Participation and the Aggregate Demand for Food If Cash Subsidies Replaced the Food Stamp Program in Washington State." Ph.D. Thesis, Department of Agricultural Economics, Washington State University, 1982.

Physicians Task Force on Hunger in America. "Increasing Hunger and Declining Help: Barriers to Participation in the Food Stamp Program." Mimeo, Harvard University, May 1986.

Bibliography

Affholter, Dennis P., and Frederica D. Kramer (eds.). Rethinking Quality Control: A New System for the Food Stamp Program. Washington, D.C.: National Academy Press, 1987.

Akin, John S., David K. Guilkey, and Barry M. Popkin. "Changes in Elderly Household Participation in the Food Stamp Program." Journal of Nutrition for the Elderly, 43:3 (1985), pp. 25-51.

Allen, Joyce. "Domestic Food Programs." National Food Review (Summer 1982), pp. 21-22.

Bick, Barbara. "Comparison of Food Stamp Participation and Eligible Nonparticipants in Two Ohio Counties." Masters Thesis, Department of Home Economics, Ohio State University, 1981.

Bickel, Gary, and Maurice McDonald. "Assets of Low Income Households: New Findings on Food Stamp Participants and Nonparticipants." Food and Nutrition Service, U.S. Department of Agriculture, Washington, D.C., 1981.

Biderman, A.D., et al. Report on a Pilot Study in the District of Columbia on Victimization and Attitudes Towards Law Enforcement. Field Survey No. 1, President's Commission on Law Enforcement and Administration of Justice. Washington, D.C.: U.S. Government Printing Office, 1967.

Biderman, A. D., and J. C. Moore. Report of the Workshop in Applying Cognitive Psychology to Recall Problems of the National Crime Survey. Washington, D.C.: Bureau of Social Science Research, September 17-18, 1980.

Blanchard, L., et al. Final Report: Food Stamp ssi/Elderly Cashout Demonstration Evaluation. Princeton, N.J.: Mathematica Policy Research, 1982.

Blaylock, James R., and David M. Smallwood. "Reasons for Nonparticipation in the Food Stamp Program." Western Journal of Agricultural Economics, 9:1 (1984), pp. 117-26.

Brown, J. Larry. "Hunger in the U.S." Scientific American, 256:2 (1987), pp. 37-42.

Burt, James, S. R. Johnson, and Karen Morgan. "Participation in the Food Stamp Program: A Logit Model Analysis, 1979-1980." Report to

The odds of participation, calculated through logistic regression, can be used to generate the probability of participation as the following equation:

$$\text{probability of participation} = \frac{\text{odds of participation}}{1 + \text{odds of participation}}$$

For instance, the coefficient for the logistic regression model—incorporating 1 = participation as the dependent variable and the number of children as the independent variable—was .511086. By taking the inverse of the natural logarithm (e) to the .511086 power, the result is 1.67. Thus, for each additional child, there is a 67-percent increase in the odds of participating in the Food Stamp program. (See table 2.2.)

For table 3.3, two coefficients are estimated for each independent variable. For instance, the coefficient that estimates the difference between citing program or access problems and a lack of need for benefits as the number of children increases was .370142. By taking the inverse of the natural logarithm of this number, the result is 1.448, or an almost 50-percent increase in the odds of citing program or access problems rather than a lack of need for benefits. Similarly, the coefficient of contrasting a lack of knowledge and a lack of need for benefits was .0644295, resulting in a 6-percent increase in the likelihood of citing a lack of information as the number of children increases. (See table 3.3.)

We performed three kinds of analyses. First, we estimated the proportion of eligible households participating in the Food Stamp program and the proportion giving one of three reasons for nonparticipation. Second, we estimated the degree of association between the dependent variables (participation status and reason for nonparticipation) and discrete household characteristics. Third, we estimated the degree of association between the dependent variables and continuous household characteristics.

Analyses of the Dependent Variables

The proportion of eligible households participating in the Food Stamp program was estimated simply by dividing the weighted number of participating households in the PSID sample by the weighted number of eligible households. The proportion of households citing various reasons for not participating in the program was estimated in the same way.

Analysis of the Association Between Dependent Variables and Discrete Independent Variables

The associations between participation status and discrete independent variables (tables 2.1) were expressed as the probability that a given category of household would participate in the program. The probability of participation was estimated as the weighted number of participants in a given category divided by the weighted total number of households in the category. The associations between reasons for nonparticipation and the discrete independent variables (table 3.2) were estimated in a similar way.

Analysis of the Association Between Dependent Variables and Continuous Independent Variables

The type of statistical analysis commonly used to examine the association between dependent variables and independent variables is termed the generalized linear model.¹ The specific kind of model that is most appropriate depends on the type of variables used. Logistic regression analysis is appropriate when the dependent variable is discrete.

We used the logistic regression model to estimate the effects of the number of children, years of schooling, and income on household participation in the Food Stamp program. We also used multinomial logistic regression to estimate the effect of number of children, years of schooling, and income on the odds of citing one of the three specific reasons for nonparticipation—lack of desire for benefits, lack of information

¹A dependent variable is one whose value the model is attempting to predict (for example, reasons for nonparticipation). An independent variable is one whose values are known and are used to predict the value of the dependent variable. Examples of independent variables are the number of children, income, and education.

Data Analysis Methods

The PSID Sample

The Panel Study of Income Dynamics (PSID) is a longitudinal survey of a nationally representative sample of families conducted by the Survey Research Center of the University of Michigan. Since 1968, PSID has been a source of information on a nationally representative sample of families on such broad issues as sources of family income, food expenditures, and work hours, and on more limited topics such as nonparticipation in the Food Stamp program.¹

Variables

Variables can be either continuous or discrete, and the type determines the appropriate analysis method. With continuous variables, the difference between any two values can be expressed numerically, but with discrete variables the difference cannot be so expressed. Annual income (expressed in dollars per year) and educational level (expressed as years of schooling attained) are examples of continuous variables. Race (expressed as either white or nonwhite) and sex (expressed as male or female) are examples of discrete variables. Note that a continuous variable (for example, age expressed in years) may sometimes be recast as a discrete one (for example, age expressed as elderly or nonelderly²).

We examined two phenomena—whether households participate in the Food Stamp program, and why they may not—by analyzing data from the 1987 PSID. Two dependent variables were used:

- participation status, which was coded 0 for a household that did not participate in the Food Stamp program and coded 1 for a participating household; and
- reasons for nonparticipation, which contrasted actual or perceived problems with access and lack of information about the program, with lack of need for program benefits.

For candidate-independent variables, we turned to our July 1988 report, in which we synthesized studies on participation and reasons for nonparticipation. These studies considered 19 household characteristics that various researchers had hypothesized as being related to program

¹PSID has been supported by various federal agencies, including the Food and Nutrition Service (FNS) of the Department of Agriculture, which administers the Food Stamp program.

²The Food Stamp program defines an elderly household as a household with a member who is at least 60 years of age.

from our estimates. Combining data from these two different data bases, each of which has limitations, naturally compounded their shortcomings. Further, our estimate of current participation matched fairly closely the consensus of estimates available in the literature, as we pointed out in our first report in this series.¹

4. In the draft report reviewed by the Department of Agriculture, we attempted to provide some plausible explanations for many of the statistical findings. However, on the basis of Agriculture's comments, we agreed that some of our attempts at explanations were somewhat speculative, and therefore we have eliminated these attempts at explanation throughout the text of the final report.

5. FNS does not believe that food-stamp-eligible and nonparticipating recipients of Supplemental Security Income and/or other welfare benefits should have a high probability of reporting program or access problems as their primary reason for not participating in the program. Nevertheless, as indicated in table 3.2, the relationship is statistically significant and nontrivial in strength.

6. Our primary objective in this series of studies was to identify the reasons why some households eligible for food stamps fail to participate in the program. We achieved that objective and further delineated the specific reasons for nonparticipation that were most likely to be reported by various subgroups of participants. We did not focus on methods of outreach or techniques to tailor outreach to various subgroups. However, should the Department of Agriculture need our assistance in designing outreach for their program, we would be happy to offer our technical assistance.

7. Information on the number of cases for each response for table 3.1 has been included as appendix III.

8. We have adopted FNS's suggested wording.

9. Additional details on our method have been added to appendix II, and we have slightly expanded the discussion in the text.

¹See *Food Stamps: Examination of Program Data and Analysis of Nonparticipation*, GAO/PEMD-88-21 (Washington, D.C.: July 1988).

**Appendix I
Comments From the Department
of Agriculture**

-- The "Total" and footnote to this table indicate the table reflects responses given by all eligible nonparticipants with adjustments made to the percentages to account for missing data and responses such as "don't know". The current placement of responses presented in the December 1988 GAO report that were "job related" and indicated the household "never bothered to apply" is not clear.

Now page 17.
See comment 13.

- o page 17: In the last sentence of the second paragraph under "Reasons Cited by Eligible Households for Not Participating in the Program" the words "that received other welfare benefits" should be inserted between the words "households" and "report".

Now page 18.

- o page 18: Table 3.2: The Probability of a Food Stamp Eligible But Nonparticipating Household Citing a Reason for Nonparticipation as the Predominant Reason

See comment 14.

The figures cited in this table are, to some extent, misleading. For example, the table shows 47 percent of the eligible nonparticipants receiving other welfare benefits cite program/access problems. Earlier, however, the report notes that 87 percent of all those receiving other welfare benefits also receive food stamps. Thus, of all those receiving other welfare, only 6 percent $[(.47 \times (1 - .87)) = .06]$ report any difficulty with program access.

Now page 18.

- o page 18: Table 3.3: The Predominant Reason for Nonparticipation Cited By Food Stamp Eligible Nonparticipants by the Number of Children, Income, and Education

See comment 15.

This table is inadequately described in the draft report, and as a result is uninterpretable. What does it mean to identify a predominant reason for nonparticipation for incremental changes in a variable? Is it the reason that is changing most, or the reason that is cited most?

Now appendix II, beginning on page 36.

- o Appendix I: Variables Considered in GAO's Analysis

See comment 16.

No formal model is presented in the draft report, although the tone and presentation of this appendix suggests that one was developed.

Now page 42.

- o Appendix II: Bibliography

See comment 17.

The draft report lists 50 references in its bibliography, yet only cites the two GAO reports that are cited in the report. The full range of titles of these listings is unclear. The bibliography does include reports by USDA and CBO that estimated eligibility and participation rates using SIPP, a much better data base for simulating participation rates than the FSID. The lack of any reference to these reports and a discussion of the difference in their findings relative to what is presented from the FSID is a grave omission in the draft report.

**Appendix I
Comments From the Department
of Agriculture**

For children the primary documentation typically consists of some proof of their age and either their Social Security number or an application for one. It is not immediately clear how such requirements could increase the number and length of interviews or visits to the office. This section also seems to contradict the earlier assertion that each child increases the probability of participation by 67 percent.

See comment 5.

Now pages 4, 18, and 19.

- o The Draft report repeatedly cites and uncritically accepts reported access problems for households with Supplemental Security Income (SSI) or other welfare benefits (pages v, 9, 21, 22). This finding is actually quite puzzling. Why would such households have easier access to Social Security or welfare offices than to food stamp offices? FSP regulations require States to arrange for the local Social Security office to complete and forward food stamp applications or out-station State food stamp eligibility workers to accept applications. In either case, SSI households can apply for food stamps without making a separate trip to the food stamp office. FSP regulations also require States to conduct a single interview at initial application for both public assistance and food stamp purposes. In most areas, the welfare and food stamp offices are located together. The relatively high participation rates cited by GAO (62 percent for SSI and 87 percent for other welfare households) belie the argument that access is difficult for these groups. These rates rather offer testimony to the effectiveness of the joint processing provisions to make program benefits more accessible to those in the welfare system.

Specific Remarks

Now page 4.

- o page vi: "Although the exact mix of nonparticipant and reasons for nonparticipation will vary from locale to locale, GAO found that at a national level the groups logically to be most likely to be influenced by effective outreach are households that lack information about the program, that is, households headed by single individuals (white males and females and nonwhite females)."

See comment 6.

As noted earlier, the definition of "households headed by single individuals" is extremely ambiguous. It is not clear--and the draft report does not offer any insights--how "effective outreach" might be targeted to such a diverse group of single working-age adults, single elderly persons living alone, and never-married mothers with children. Some further elaboration of the characteristics of effective outreach would be extremely useful.

Now page 9.

- o page 3: Information about the number of cases used in the analyses should also be reported. We would also like to see information on the number of cases analyzed for each category reported in the tables throughout the report.

See comment 7.

Second, GAO indicates that it "excluded households whose income exceeded either of two income tests (food stamp gross and net income thresholds adjusted for household size) or whose assets based on type of household (elderly or nonelderly) exceeded asset limits."

Appendix I
Comments From the Department
of Agriculture

COMMENTS ON DRAFT GAO REPORT:

FOOD STAMP PROGRAM: A DEMOGRAPHIC ANALYSIS OF
PARTICIPATION AND NONPARTICIPATION

MAY 1989

General Remarks

- o The discussion of the Panel Study of Income Dynamics (PSID), its relevance for estimating eligibility for Food Stamp Program (FSP) benefits, and the analytic procedures for performing the eligibility estimation does not adequately convey the complexity of this analysis and its implications for the results. In addition to problems of income and program participation underreporting, the PSID is limited in several ways that restrict its usefulness for estimating FSP eligibility:
 - The PSID collects information on annual income, while program eligibility uses monthly income. The low-income population experiences sizable changes in income over the course of the year that are not captured by the annual measure available in the PSID.
 - Information on deductible expenses is extremely limited: the earned income deduction must be approximated as a percentage of annual earnings; information on medical expenses is not collected at all; and only annual rather than monthly shelter expenses are reported.
 - Asset holdings are not reported at all, requiring a rough approximation based on reported asset income (the most seriously underreported income source in household surveys). The asset value of vehicles is ignored completely.
- o The draft report overstates the extent of nonparticipation by relying solely on the PSID. Both the Congressional Budget Office (CBO)¹ and the U.S. Department of Agriculture (USDA)² recently reported substantially higher participation rates using the Survey of Income and Program Participation (SIPP)--a data base much better suited to analysis of eligibility for the FSP--and adjusting for underreporting of program participation. GAO's conclusions that less than half of all eligible households receive food stamps is largely a reflection of the limitations of the PSID for this analysis. The comparability of this estimate to others found in the literature speaks to the absence of suitable data until the advent of SIPP.

¹ Congressional Budget Office. "The Food Stamp Program: Eligibility and Participation." Staff Working Paper, Washington, D.C.: November 1988.

² Doyle, P. and H. Boebhut. "Food Stamp Program Participation Rates." Current Perspectives on Food Stamp Program Participation. Alexandria, Virginia: Food and Nutrition Service, U.S. Department of Agriculture, 1988.

:

See comment 2.

See comment 3.

Comments From the Department of Agriculture

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



United States
Department of
Agriculture

Food and
Nutrition
Service

3101 Park Center Drive
Alexandria, VA 22302

Ms. Eleanor Chelinsky
Assistant Comptroller General
Program Evaluation and
Methodology Division
U.S. General Accounting Office
Washington, DC 20548

JUN 15 1990

Dear Ms. Chelinsky:

This letter responds to the draft General Accounting Office (GAO) report entitled "Food Stamp Program: A Demographic Analysis of Participation and Nonparticipation." The Food and Nutrition Service (FNS) has a longstanding interest in the many complex issues surrounding participation and reasons for nonparticipation in the Food Stamp Program. Assuring assistance is available to those in need is a matter of great concern to program managers and policy officials at all levels. Because of our interest in this area, we have some serious reservations about the analyses presented in the report.

We are particularly concerned that the report overstates the extent of nonparticipation by relying too heavily on data that offers only a rough approximation of food stamp rules. Using data better suited to estimating eligibility, we recently found that 60 percent of eligible households and 66 percent of eligible individuals participate in the Food Stamp Program. ^{1/} Furthermore, 80 percent of the total benefits that could be paid to eligible households are in fact provided.

Our work also indicates that a substantial number of the eligible nonparticipants have relatively high income and are entitled to relatively small benefits. About 40 percent of all eligible nonparticipant households would receive \$10 or less in monthly benefits if they participate. About 60 percent of the eligible nonparticipant households have income above the poverty line. Taken together, these findings indicate the program is effective at reaching those with the greatest need.

While we understand your motivation for using the Panel Study of Income Dynamics (PSID), the report fails to address or make adequate adjustments for the survey's limitations. Like all household surveys, the PSID suffers from problems of income and program participation underreporting. Since eligibility for food stamps requires a complete accounting of all cash income available to a household and sets limits on how much households may have, underreporting of income makes some households look eligible when in fact they are not. Likewise, underreporting of Food Stamp Program participation means that some households that received benefits do not report that receipt, resulting in a count of participants that is too small. With too few reported participants and too many estimated eligibles, the calculated participation rate (participants divided by eligibles) is too small.

^{1/} These findings are supported by a 1988 study conducted by the Congressional Budget Office using the same data from the Survey of Income and Program Participation.

With regard to Agriculture's statement that we overestimated participation rates, it should be mentioned that the index of participation we estimated uses in the numerator the number of persons who said they participated in the Food Stamp program at any time during the year. This is not an estimate for a single month, as is usually reported by the Department of Agriculture; rather, it is a number higher than it would be for any individual month. Thus, while there may be some income and participation underreporting, as suspected by FNS, there also may be a participation overestimate because of the way our numerator is estimated.

We maintain that there is no reason to believe that the reasons for nonparticipation derived from our analysis were affected by the imprecision of our estimates of nonparticipation rates that resulted from differences inherent in the PSID data base.

Agriculture criticizes us for not using participation rate estimates produced by them and the Congressional Budget Office (CBO) that, Agriculture states, show participation rates to be above those cited in our report. We considered the estimates produced for the Department of Agriculture by Mathematica Policy Research, Inc., that combined the number of participants from the Department of Agriculture's Quality Control data base with estimates of eligibility from the Survey of Income and Program Participation (SIPP).¹ By combining data from these two sources, Agriculture arrived at a participation rate for households of 60 percent. Further, their estimate for participation rates in the Food Stamp program for households headed by single women with children is just over 102 percent, for households receiving AFDC benefits 134.6 percent, and for households receiving other welfare 109.6 percent. Such rates are, of course, impossible.²

Both we and CBO have serious reservations about combining information from these two disparate data bases, as recommended by Agriculture. In fact, in its recent report, CBO states that "the participation rate may be more accurately estimated by using data from the same source (SIPP) than by mixing data from two sources (SIPP and the Quality Control

¹U.S. Department of Agriculture, Food Stamp Program Participation Rates (Washington, D.C.: November 1988).

²U.S. Department of Agriculture, Food Stamp Program Participation Rates (Washington, D.C.: November 1988), p. vi.

were households that were also participating in other welfare programs (although households who received other welfare benefits tended to participate at a far greater rate in the Food Stamp program than did other categories of households), those receiving SSI benefits, and most nonwhite households. Also, as the number of children in a household or household income increased, the likelihood of program or access problems being cited as the predominant reason for nonparticipation in the Food Stamp program likewise increased.

From a policy viewpoint, an informed decision on the part of an eligible household not to participate in the program is not an issue. Lack of information about the program, however, and at least some program and access problems can and should be remedied. Since more than three fifths of the eligible households gave these reasons for nonparticipation—36.8 percent gave a lack of information, and 25.0 percent gave program or access problems as reasons for nonparticipation—it is clearly important to address these problems. The recently enacted Hunger Prevention Act of 1988 (PL-100-435) provides a means for doing so.

The act addresses the issue of reducing program and access barriers to participation by directing that simplified application forms be used, by encouraging additional training of certification workers to reduce the incidence of eligible households being denied benefits, and by endorsing other techniques designed to reduce several barriers to participation in rural areas.

The Hunger Prevention Act also addresses the problem of lack of program information by providing for federal support of outreach or education efforts. The act specifically provides federal matching funds for outreach efforts to those states wishing to conduct outreach. These outreach efforts are aimed at informing low-income households about food stamp availability, eligibility requirements, application procedures, and benefits.

Our analysis showed that, at a national level, some groups of the population were more likely than others to lack information about the program. Although the exact mix of nonparticipants and reasons for nonparticipation varied from locale to locale, we found that at a national level the groups that were most likely to be influenced by effective outreach were households headed by single individuals (white males and females and nonwhite females).

For each additional child in a household, the household was more likely to report program or access problems than either lack of information or a lack of desire for benefits. Our data also indicated that for every additional \$1,000 in annual income, households were slightly more likely to cite program or access problems as their major reason for nonparticipation. (See table 3.3.)

Summary

In sum, we found that the reasons eligible nonparticipants reported for not participating in the Food Stamp program varied according to characteristics of their households. Households headed by single individuals had a high probability of reporting a lack of information as the principal reason for nonparticipation. Households in other welfare programs and most categories of nonwhite households considered program or access problems as their main deterrent to participation in the Food Stamp program. In addition, as the number of children or the amount of income increased, households were more likely to perceive program requirements or access to the program as a problem. Groups that reported a lack of desire for benefits included the elderly and Social Security recipients. As education levels rose, a lack of need for Food Stamp benefits became a more likely reason for nonparticipation among eligible households.

**Chapter 3
Reasons for Nonparticipation**

Table 3.2 : The Probability of a Food-Stamp-Eligible Household Citing a Particular Reason for Nonparticipation as the Predominant Reason

Household category	Predominant reason	Probability	95-percent confidence interval^a
Recipient of other welfare benefits	Program or access problems	.47	± .33
Recipient of SSI benefits	Program or access problems	.52	± .23
Recipient of Social Security benefits	Lack of desire for benefits	.43	± .11
Elderly	Lack of desire for benefits	.42	± .11
White			
Single males	Lack of information	.55	± .26
Single females	Lack of information	.53	± .31
Widowed, divorced, or separated	Lack of desire for benefits	.46	± .12
Married couples	Lack of desire for benefits	.44	± .18
Nonwhite			
Single males	Program or access problems	.42	± .44
Single females	Lack of information	.39	± .36
Widowed, divorced, or separated	Program or access problems	.46	± .19
Married couples	Program or access problems	.39	± .33

^aBecause of the sampling design of PSID, households are selected in a random but nonequal manner. To reflect the unequal probability of selection, weights are assigned to each household. In order to analyze the data properly, these weights must be taken into account. All analyses are therefore based on weighted data. To adjust for the complex sample design of PSID, we doubled all confidence intervals compared to what they would have been if PSID had used simple random sampling to more accurately reflect the estimated sampling errors. This is known as adjusting for the design effect.

Table 3.3 : Increase in the Likelihood That a Reason for Nonparticipation Associated With Number of Children, Income, or Education Will Be Cited

Household characteristic	Percent of change in likelihood of participation
Number of children	45-percent increase in the likelihood that program or access problems rather than lack of desire for benefits will be cited with each additional child; 38-percent increase in the likelihood that program or access problems rather than lack of information will be cited with each additional child
Income	5-percent increase in the likelihood that program or access problems rather than lack of desire for benefits will be cited with each additional \$1,000 income; 2-percent increase in the likelihood that program or access problems rather than lack of information will be cited with each additional \$1,000 income
Education	10-percent increase in the the likelihood that lack of desire for benefits rather than program or access problems will be cited with each additional year of education; 10-percent increase in the likelihood that lack of desire for benefits rather than lack of information will be cited with each additional year of education

Chapter 3
Reasons for Nonparticipation

Table 3.1: Distribution of Reasons for Nonparticipation in the Food Stamp Program Cited by Eligible Households

Primary reason for nonparticipation	Percent citing category ^a
Lack of desire for food stamps	
Did not need food stamps	28.6
Personal attitude about receiving benefits	9.6
Subtotal	38.2%
Lack of information about Food Stamp program	
Thought income or assets too high	21.0
Thought they were ineligible for some other reason	12.1
Did not know how to apply	3.7
Subtotal	36.8%
Program or access problems	
Reported administrative "hassles"	12.9
Told by welfare officials that they were ineligible	9.3
Physical access problems	2.8
Subtotal	25.0%
Total	100.0%

^aPercentages in this table have been adjusted for removal of categories for missing data, for responses of "do not know," and for instances where data were not available. These unusable categories comprised 7.1 percent of the unadjusted responses. (Eligible households not participating in the Food Stamp program constituted 56.2 percent of the total number of food-stamp-eligible households.)

As indicated in table 3.1, the two categories of reasons most often cited by eligible households for not participating in the Food Stamp program were a lack of desire for benefits (38.2 percent) and a lack of information about the Food Stamp program (36.8 percent).

Among households reporting a lack of desire for benefits, a large majority of the respondents reported a lack of perceived need rather than a negative personal attitude about receiving benefits. That is, their responses did not indicate that they felt there was a "stigma" associated with receiving benefits.

Among respondent households identified as lacking information about the Food Stamp program, confusion over the income limits, asset limits, and other regulations applicable to applying for benefits was the most frequently reported problem.

The least often cited major category of reasons for not participating in the Food Stamp program was program or access problems (25.0 percent). Within this category, the most frequently cited problem was actual or perceived administrative "hassles" (12.9 percent).

Table 2.2 indicates that for every unit increase in the number of children in a household, the likelihood of household participation increased 67 percent. This finding was consistent with previous work that examined differences between participants and nonparticipants in the Food Stamp program.

In addition, for every \$1,000 increase in annual income, households were 5 percent less likely to participate in the Food Stamp program. Again, this result matched our expectations.

Finally, for every additional grade of education attained by the head of the household, households were 6 percent less likely to participate in the Food Stamp program.

Summary

In sum, eligible household participation in the Food Stamp program was highly associated with participation in other welfare programs. Participation in the Food Stamp program was also highly associated with households headed by single, nonwhite women and with households that participate in ssi. The likelihood of household participation in the Food Stamp program increased markedly with each additional child in the household. Low participation rates were associated with households headed by elderly individuals or by single males (either white or nonwhite) and with households that received Social Security benefits.

These results have immediate implications for the Food Stamp program. Any effort by the Department of Agriculture to increase participation among eligible households should consider various mechanisms that are tailored to the characteristics of nonparticipating groups. The specific techniques used to encourage these groups to participate should also take into account the reasons these groups report for nonparticipation. In the next chapter, we present data that relate to these reasons for nonparticipation.

Chapter 2
Participation in the Food Stamp Program

Table 2.1 : Probability of Participation, by Category of Household

Household category	Probability of participation	95-percent confidence interval ^a
All eligible households	.44	± .05
Recipients of other welfare benefits	.87	± .08
Recipients of Supplemental Security Income	.62	± .14
Recipients of Social Security	.31	± .09
Elderly	.34	± .09
White		
Single males	.17	± .16
Single females	.43	± .22
Widowed, divorced, or separated	.37	± .09
Married couples	.42	± .13
Nonwhite		
Single males	.30	± .33
Single females	.75	± .16
Widowed, divorced, or separated	.49	± .13
Married couples	.39	± .22

^aBecause of the sampling design of PSID, households are selected in a random but nonequal manner. To reflect the unequal probability of selection, weights are assigned to each household. In order to analyze the data properly, these weights must be taken into account. All analyses are therefore based on weighted data. To adjust for the complex sample design of PSID, we doubled all confidence intervals compared to what they would have been if PSID had used simple random sampling (to more accurately reflect the estimated sampling errors). This is known as adjusting for the design effect.

Table 2.2 : Change in the Likelihood of Participation Associated With Changes in the Number of Children, Income, and Education

Household characteristic	Percent of change in likelihood of participation
Number of children	67 percent increase in the likelihood of participation for each additional child in the household
Income	5 percent decrease in the likelihood of participation for each additional \$1,000 income
Education	6 percent decrease in the likelihood of participation for each additional grade of schooling completed

All household characteristics examined—recipients of other welfare program benefits, recipients of ssi benefits, recipients of Social Security benefits, the elderly, education, income, number of children, and marital status and gender—were found to be associated with participation in

Second, for each characteristic, we calculated the probability of participation in the Food Stamp program by households possessing that characteristic.

Third, we examined reasons that eligible households reported for nonparticipation in the Food Stamp program. PSID included a series of questions that yielded reasons why households did not participate. All responses to questions asked by PSID were given by the head of the household. In our report, when we refer to answers to PSID questions, these responses in all cases were from the head of the household. (In this report, we sometimes use the term “household” to represent the head of the household.) We examined reasons eligible households reported for not receiving food stamps. For most household characteristics, we calculated the frequency of reasons for not participating in the program. For three characteristics—number of children, income, and education level—we estimated the strength of the relationship between the household characteristic and particular reasons for not participating in the Food Stamp program by performing logistic regression analyses.⁴

Eligible nonparticipants were classified into one of two groups: (1) those who reported they thought they were ineligible and (2) those who thought they were eligible. Those who reported they were eligible were further subdivided into those who tried to obtain benefits but did not receive them and those who did not try to obtain benefits. By combining the reasons for nonparticipation across the three groups of eligible nonparticipants, we estimated the relative importance of each reason.

Our review was conducted in accordance with generally accepted government auditing standards.

Report Structure

Following this chapter, the report is divided into three additional chapters: one on household characteristics associated with Food Stamp program participation; one on household characteristics associated with the three main reasons for nonparticipation; and a final chapter presenting a summary of our work, a recommendation, and agency comments on our report with our response.

⁴Specification of the model we used can be found in appendix II.

Introduction

The Food Stamp program, the nation's largest food assistance program, currently provides benefits to almost 7 million households, or approximately 19 million individuals, each month. The Food and Nutrition Service (FNS) of the Department of Agriculture oversees the program, while day-to-day operations are administered at the state or local level. In fiscal year 1988, the federal government spent approximately \$12 billion for benefits and program operations. To receive food stamps, most applicants must first pass a gross income and net income test, adjusted for household size, and an asset test. Households may voluntarily terminate enrollment in the program, or they may be dropped because a change in circumstances makes them ineligible.

Despite the substantial assistance that is being provided by the Food Stamp program, there is concern that some households that are eligible for food stamps and in need of them are not participating in the program. This concern led Congressman Bill Emerson, the Ranking Minority Member of the Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition of the Agriculture Committee to request that we determine why some food-stamp-eligible households do not participate in the program. We responded to this request with two earlier reports. This is the final report in this series. Our first report in this series was Food Stamps: Examination of Program Data and Analysis of Nonparticipation (GAO/PEMD-88-21), issued in July 1988. It focused on Food Stamp program operations, state program variations, and existing research on reasons for nonparticipation and was generally based on data reported for the years 1979 through 1981. This was followed in December 1988 by Food Stamps: Reasons for Nonparticipation (GAO/PEMD-89-5BR), which focused on responses to a few broad questions on reasons for nonparticipation as cited in the 1980 and 1987 Panel Study of Income Dynamics (PSID) surveys of nationally representative samples of families.¹ The present and final report describes the results of a more in-depth analysis of the 1987 PSID, analyzing participation across various demographic factors and reported reasons for nonparticipation.

¹PSID is a survey conducted by the Survey Research Center of the University of Michigan. The survey was conducted in 1980 and 1987 and requested information from respondents with respect to their attitudes and behavior in 1979 and 1986, respectively. (We contracted with the Survey Research Center in 1987 to collect data on reasons why households did not participate in the Food Stamp program. These questions approximate those asked in 1980.)

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separated), a Social Security recipient, or an elderly person. The households that cited a lack of information about the Food Stamp program as the predominant reason for not participating were headed by white single males, white single females, and nonwhite single females. The households that reported problems with the Food Stamp program or access to the program as their predominant reason for nonparticipation were those receiving Supplemental Security Income or other welfare benefits and those headed by a nonwhite widowed, divorced, or separated individual; a single male; or a married individual. Also, as the number of children or the household's income rose, problems with the program or lack of access to the program became the predominant reason for nonparticipation in the Food Stamp program.

From a policy viewpoint, the desire of eligible households not to participate may not be a problem. Conversely, difficulty with the program, lack of access to it, and lack of information about it are things that can and should be remedied. Since more than three fifths of the eligible households have given these reasons for nonparticipation, it is important to address these problems. The recently enacted Hunger Prevention Act of 1988 provides a means for addressing program and access, as well as lack of information, problems. The act specifies actions intended to reduce precisely those problems, such as application form simplification and case worker training. The act also encourages outreach and requires that it be focused on low income households. GAO's analysis shows that at the national level certain groups within the population are more likely to lack information about the program. Although the exact mix of nonparticipants and reasons for nonparticipation will vary from locale to locale, GAO found that at a national level the households potentially most likely to be influenced by effective outreach are those households that report lack of information about the program—that is, households headed by single individuals (white males and females and nonwhite females).

Recommendation to the Secretary of Agriculture

Given that outreach efforts may be resumed under the Hunger Prevention Act, GAO recommends that the Secretary of Agriculture direct the Administrator of the Food and Nutrition Service to encourage states to target outreach to those groups that would most benefit from it and to tailor outreach programs to the needs and characteristics of these specific groups. Such effective targeting and tailoring of outreach programs should maximize the returns on investments in outreach by the states and the federal government.

Executive Summary

Purpose

The Food Stamp program, the nation's largest food assistance program, currently provides benefits to almost 7 million households, or approximately 19 million individuals, each month. In fiscal year 1988, the federal government spent approximately \$12 billion for food stamp benefits and program operations. Despite this substantial assistance provided to people participating in the Food Stamp program, according to data from the Panel Study of Income Dynamics, more than half of the households eligible for food stamps do not receive these benefits.

GAO was asked by the Honorable Bill Emerson, Ranking Minority Member of the Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition of the House Committee on Agriculture, to analyze the Food Stamp program in detail, particularly with respect to households that meet the eligibility criteria yet do not participate in the program. GAO was asked to determine why food-stamp-eligible households do not participate in the program. GAO partially responded to this request in two earlier reports. This is the final report on this issue.

Background

GAO's first report in this series was Food Stamps: Examination of Program Data and Analysis of Nonparticipation (GAO/PEMD-88-21), issued in July 1988. It concentrated on program operations, state program variations, and existing research on reasons for nonparticipation. That report was based primarily on data from the period 1979 to 1981. This was followed in December 1988 by Food Stamps: Reasons for Nonparticipation (GAO/PEMD-89-5BR), which focused on responses to a few broad analyses of the reasons for nonparticipation as reported in the 1980 and 1987 Panel Study of Income Dynamics surveys of nationally representative samples of households. The present and final report offers the results of a more in-depth analysis of the 1987 survey, analyzing both participation across various demographic factors and the reasons reported by food-stamp-eligible but nonparticipating households. In this report, GAO addresses two questions:

1. What demographic characteristics or factors are associated with Food Stamp program participation?
2. What reasons do food-stamp-eligible households give for not participating in the program?

The data from which GAO derives its answers to these questions are the latest source available, having been collected in the 1987 Panel Study of Income Dynamics survey.

