

THE EFFECTS OF LEGISLATIVE
CHANGES IN 1981 AND 1982
ON THE FOOD STAMP PROGRAM
VOLUME II

TECHNICAL APPENDICES

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For the Office of Analysis and Evaluation

Food and Nutrition Service

U.S. Department of Agriculture

May 1985

This research was supported by Contract No. 53-3198-4-9 from the Food and Nutrition Service, USDA. Opinions expressed in this document are those of the authors and do not necessarily represent the views of The Urban Institute or its sponsors.



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APPENDIX A
SPECIFIC LEGISLATIVE CHANGES TO
THE FOOD STAMP ACT, 1981 - 1982
(reprinted from the FNS Interim Report to Congress)

1. Omnibus Budget Reconciliation Act of 1981 (P.L. 97-35; enacted August 13, 1981)

A. Measures to Control Program Costs

Sec. 101 Family Unit Requirement

- o Children living with nonelderly parents are required to file for food stamp benefits as a single unit. This stipulation prevents children and parents who share a residence from claiming separate household status on the basis of separate food purchases and meal preparation. (The "food unit" test continues to determine all other household composition situations.)

Sec. 102 Boarders

- o The provision for the eligibility of boarders is deleted.

Sec. 103 Adjustment of the Thrifty Food Plan

- o The adjustment of the basic guarantee (the Thrifty Food Plan) is delayed from January 1982 (and each January thereafter) to April 1982, July 1983, and October 1984 (and each October thereafter). Adjustments are to reflect changes in the cost of the Thrifty Food Plan in the 15-month period ending 3 months before the date of the adjustment.

Sec. 104 Gross Income Eligibility Standard

- o The income eligibility test for households without an elderly or disabled member is changed from a net income standard equal to 100 percent of the income poverty guidelines to a gross income standard equal to 130 percent of these guidelines.

Sec. 105 Adjustment of Deductions

- o The adjustment of the standard deduction and the dependent care/ excess shelter deduction limit is delayed from January 1982 (and each January thereafter) until July 1983, October 1984, and each October thereafter.
- o Homeownership costs are removed from the price indices which serve as the basis for these adjustments.

Sec. 106 Earned Income Deduction

- o The earned income disregard is lowered from 20 percent to 18 percent of earnings.

Sec. 107 Retrospective Accounting

- o Effective October 1, 1983, household income (except for migrant farmworkers) must be determined on a retrospective basis for the purpose of establishing benefit levels.
- o Eligibility may be determined prospectively or retrospectively.
- o Initial allotments to newly certified households are to be supplemented to prevent serious hardship.
- o USDA may waive the provisions of this section to permit a State to calculate income for food stamp purposes in the same fashion it uses for AFDC.

Sec. 108 Periodic Reporting

- o Effective October 1, 1983, certain households are required to report on their circumstances each month. All households with earners, potential earners, or work registrants, or subject to AFDC monthly reporting must file monthly reports. Exemptions are provided for migrant farmworkers and households in which all members are elderly or disabled and do not earn income.

Sec. 109 Eligibility of Strikers

- o Households with strikers are ineligible unless eligible immediately before the strike.
- o No household may receive increased benefits because of a strike lowering its income.

Sec. 110 Prorating First Month's Benefits

- o Initial allotments are prorated from the date of application. Previously, newly certified households got a full month's allotment for the month of application regardless of the date of application.

Sec. 111 Outreach

- o State agency outreach requirements are abolished.
- o Federal administrative cost sharing funds may not be used for outreach.

Sec. 113 Waiving and Offsetting Claims, Improved Recovery of Overpayments

- o USDA may recover claims against States by reducing administrative cost sharing funds.
- o States may recover fraud and nonfraud claims against households (except those caused by State agency error) by reducing coupon allotments.

Sec. 115 Repeal of Increases in Dependent Care Deductions for Working Adults and Medical Deductions for the Elderly and Disabled.

- o The Act repeals two liberalizations of the income deduction structure enacted by the 1980 amendments to the Food Stamp Act and scheduled for implementation on October 1, 1981.
- o One change would have created a deduction for dependent care expenses up to \$90 separate from the excess shelter cost deduction.
- o The other change would have lowered the threshold for the medical expense deduction from \$35 to \$25 and counted the medical costs of nonelderly, nondisabled spouses toward the deduction.

Sec. 116 Puerto Rico Block Grant

- o Puerto Rico's participation in the Food Stamp Program is terminated as of July 1, 1982.
- o Puerto Rico will receive an \$825 million block grant (\$206.5 million for the last quarter of Fiscal Year 1982) for assistance to needy persons.

B. Measures to Strengthen Program Administration

Sec. 112 Disqualification Penalties for Fraud and Misrepresentation

- o The basis for disqualification is broadened to include violations of State statutes.
- o Disqualification penalties for intentional program violations are increased to 6 months for the first offense, 1 year for the second offense, and permanently for the third offense.
- o No household may receive increased benefits because a member is disqualified.
- o States must proceed against alleged violators either through administrative hearings or judicial action.

Sec. 114 States' Share of Collected Claims

- o States may retain 50 percent of all fraud claims and 25 percent of all nonfraud claims (except those caused by State agency error).

2. Food Stamp and Commodity Distribution Amendments of 1981 (P.L. 97-98; enacted December 22, 1981)

A. Measures to Control Program Costs

Sec. 1304 Adjustment of the Thrifty Food Plan

- o The adjustment scheduled for April 1982 is delayed until October 1982. The adjustment will be based on changes in the cost of the Thrifty Food Plan in the 21-month period ending June 30, 1982. The July 1983 adjustment is moved to October 1983, and will be based on June 1983 prices.

B. Measures to Strengthen Program Administration

Sec. 1302 Household Definition

- o The exclusion of elderly parents from the parent/child single household rule (section 101 of OBRA) is broadened to include disabled parents.

Sec. 1303 Alaska's Thrifty Food Plan

- o USDA is required to establish separate Thrifty Food Plans for urban and rural Alaska.

Sec. 1305 Reimbursement Exclusion

- o No portion of an AFDC grant attributable to work or child care expenses may be considered a reimbursement excluded from gross income.

Sec. 1306 Energy Assistance Payments; Excluded Payments of Other Programs

- o The criteria for determining excludable State and local energy assistance is tightened.

Sec. 1307 Disallowance of Deductions for Expenses Paid by Vendor Payments

- o Expenses met by third-party payments may not be deducted from income.

Sec. 1308 Attribution of Income and Resources of Sponsored Aliens

- o A portion of the income and resources of an alien's sponsor is deemed available to the alien.

Sec. 1309 Resources

- o The statutory freeze on resource regulations ~~on vehicles is removed.~~

Sec. 1310 Annualization of Work Registration

- o Work registration is changed from a semiannual to an annual requirement.

Sec. 1311 Work Requirements

- o The disqualification penalty for voluntarily quitting a job is applied to participants as well as applicants.
- o The maximum age of a child who can exempt his parent from work registration is lowered from under 12 to under six.
- o Lack of adequate child care for a child aged six through 11 constitutes good cause for refusing a job.

- o Failure to comply with the requirements of another program which exempts a person from food stamp work requirements will subject that person to the food stamp work sanctions.

Sec. 1312 State Issuance Liability

- o USDA is authorized to establish fiscal tolerances for State mail issuance losses.

Sec. 1313 Access of Comptroller General to Information

- o The General Accounting Office is authorized to review confidential information from applicant retailers in the course of auditing other programs.

Sec. 1314 Reporting of Abuses by the Public

- o Authorized retailers must display a sign which informs the public how to report program abuse.

Sec. 1315 Retail Redemptions

- o Savings and loan associations are authorized to redeem food coupons.

Sec. 1316 Sixty-Day Transfer of Certification

- o This section deletes the requirement that State agencies guarantee relocating households 60 days of uninterrupted benefits.

Sec. 1317 Notice of Verification

- o Application forms must contain a boldface warning that information will be verified and that falsifying information may result in criminal prosecution.

Sec. 1318 Recertification Notice

- o State agencies are required to inform households that their certification period is expiring prior to the last month of the period, rather than immediately prior to or at the start of this month.

Sec. 1319 Disclosure of Information to Comptroller General, Law Enforcement Officials

- o The General Accounting Office is authorized to review confidential information from applicant households in the course of auditing another program.
- o All information from applicant households may be provided to law enforcement officials investigating alleged program violations.

Sec. 1320 Restoration of Lost Benefits

- o The period of time for which improperly denied benefits must be restored is limited to one year.

Sec. 1321 Information

- o Wage matching with unemployment compensation or Social Security data is mandated.
- o State agency contracts with issuance agents in areas where photo ID's are required must hold the agent liable for losses in which the photo ID information was not properly inspected and recorded.

Sec. 1322 Nutrition Education Program

- o USDA may use the techniques of the expanded food and nutrition education program (EFNEP) and other programs for nutrition education activities, rather than be restricted to only using the EFNEP.

Sec. 1323 Alaskan Fee Agents

- o USDA shall permit Alaska to use fee agents for various administrative activities in rural areas.

Sec. 1324 Minimum Mandatory Court Sentence for Criminal Offenses; Work Restitution Program

- o Imprisonment not to exceed 1 year is required for second and subsequent criminal convictions under the Food Stamp Act.
- o Courts may assign work to provide restitution to the government for its losses in lieu of incarceration.
- o Courts may lengthen administrative disqualification penalties by 18 months.

Sec. 1325 Staffing

- o This provision deletes the USDA requirement to establish State staffing standards.

Sec. 1326 Incentives for Error Reduction Efforts and Corrective Action Plans

- o States must meet Federal standards for improper denials and terminations (as well as achieve a 25 percent reduction in their error rate) to qualify for enhanced administrative cost-sharing at the 55 percent level.
- o States receiving enhanced administrative cost-sharing at the 55 and 60 percent levels must develop corrective action plans to reduce errors. Formerly, only States which did not qualify for enhanced funding were required to submit these plans.

Sec. 1327 Social Security Account Numbers

- o All household members must supply social security numbers as a condition of program eligibility.

Sec. 1328 Extending and Amending Cash-Out Pilot Projects

- o Authority to operate current cash-out projects for the elderly and disabled is extended until October 1, 1985.
- o USDA is authorized to conduct cash-out demonstration projects for pure AFDC households as well as the elderly and disabled.

Sec. 1329 Nutritional Monitoring

- o USDA is to implement pilot projects to evaluate different means of measuring the nutritional status of low-income people over time.

Sec. 1330 Pilot Projects to Simplify the Processing of Applications for Certain AFDC, SSI, and Medicaid Households

- o Authorizes USDA to conduct pilot projects to evaluate simplified eligibility and benefit determination for households which also receive AFDC, Medicaid, or SSI.

Sec. 1333 Food Stamp Funding and Program Extension

- o The Food Stamp Program is reauthorized for \$11.3 billion for Fiscal Year 1982.

Sec. 1332 Incentives, Sanctions, and Claims

- o Collected claims are credited to the appropriation account for the fiscal year in which collection occurs.
- o Enhanced administrative cost-sharing is paid from the appropriation account for the fiscal year in which funds are provided.

Sec. 1333 Workfare

- o States or political subdivisions may establish workfare programs in which food stamp recipients work in exchange for their allotments.

3. Food Stamp Act Amendments of 1982 (P.L. 97-253; enacted September 8, 1982)

A. Measures to Control Program Costs

Sec. 142 Household Definition

- o Nonelderly, nondisabled siblings who live together must file as one household.
- o Elderly people, living and sharing food with others, whose infirmity precludes their separate purchase and preparation of food may, along with their spouses, qualify as separate households, as long as the other people's income does not exceed 165 percent of the poverty line.

Sec. 143 Rounding Down

- o Household benefits and adjustments to the maximum allotments, standard deduction, and the dependent care/excess shelter cap are rounded to the lower dollar.
- o The unrounded cost of the 4-person Thrifty Food Plan is used to calculate the plan for other household sizes.

Sec. 144 Thrifty Food Plan Adjustments

- o The Thrifty Food Plan will be reduced by one percent when it is adjusted on October 1, 1982; October 1, 1983; and October 1, 1984.

Sec. 146 Income Standards of Eligibility

- o Households without an elderly or disabled member must meet a net income test at 100 percent of the poverty line as well as a gross income test at 130 percent of the poverty line.

Sec. 148 Adjustment of Deductions

- o The updates of the standard deduction and dependent care/excess shelter cap, scheduled for July 1, 1983, are delayed until October 1, 1983.

Sec. 149 Standard Utility Allowances

- o States are allowed to use standard allowances for utility costs. Formerly, regulations required these allowances.
- o Only households incurring heating or cooling expenses may receive a standard allowance for these costs.
- o Standard utility allowances must be prorated among households who live together and share expenses.

Sec. 157 Job Search

- o States may require applicants to search for a job before they are certified.

Sec. 161 College Students

- o The exemption to college student ineligibility based on being the head of a household with dependents is narrowed to include only parents caring for children under age six (or under 12 if child care is not available).
- o College students who receive AFDC may receive food stamps.

Sec. 163 Initial Allotments

- o Initial prorated allotments under \$10 are eliminated.

- o The first allotment in a recertification period will be prorated if there is any break in participation.

Sec. 164 Noncompliance in Other Programs

- o Food stamp benefits are not to be increased if other program benefits are reduced for intentional noncompliance.

Sec. 170 Expedited Coupon Issuance

- o A five day processing standard is established for expedited service cases.
- o Expedited service is limited to households with less than \$150 gross income (or who are destitute migrant or seasonal farmworkers) and with not more than \$100 in liquid assets.

Sec. 180 Error Rate Reduction System

- o National error rate standards are established at 9 percent for Fiscal Year 1983, 7 percent for Fiscal Year 1984, and 5 percent for Fiscal Year 1985. Underissuances are excluded from the error rate. States can avoid liability by reducing error rates one-third of the distance to the 5 percent target in Fiscal Year 1983 and two-thirds in Fiscal Year 1984.
 - o Enhanced administrative cost-sharing is limited to the 60 percent level for States with error rates under 5 percent (including underissuances) and an acceptable rate of improper denials.
- o States which fail to meet their targets will have their Federal administrative cost-matching proportion reduced. The extent of the reduction depends on the amount by which the State misses its target.

B. Measures to Strengthen Program Administration

Sec. 145 Disabled Veterans and Survivors

- o Disabled veterans or their disabled surviving spouses and/or children are considered disabled for food stamp purposes.

Sec. 147 Coordination of Cost-of-Living Adjustments

- o Income attributable to COLA's in certain other programs (SSI, Railroad Retirement, and veteran's pensions) made on or after July 1 of any fiscal year will be excluded from food stamp income through the end of the fiscal year.

Sec. 150 Migrant Farmworkers

- o Migrant farmworkers may not be waived into retrospective budgeting.

Sec. 151 Financial Resources

- o Resource regulations (except those regarding vehicles) are frozen as of June 1, 1982.
- o Accessible retirement accounts are deemed resources.

Sec. 152 Studies

- o The statutory authority for completed studies is repealed.

Sec. 153 Categorical Eligibility

- o States may waive the resource eligibility standard for pure AFDC households.

Sec. 154 Monthly Reporting

- o The monthly reporting exemption for households in which all members are elderly or disabled and have no earned income is broadened by specifying that only the adult members need be elderly or disabled.
- o USDA is authorized to approve State waiver requests to allow certain households to report less frequently if the State demonstrates that monthly reporting would not be cost-effective for these households.

Sec. 155 Periodic Report Forms

- o This provision deletes the requirement that USDA approve State incident report forms.

Sec. 156 Reporting Requirements

- o USDA is authorized to waive the monthly reporting provisions of the Food Stamp Act in order to enable a State to coordinate its food stamp and AFDC monthly reporting requirements.

Sec. 158 Voluntarily Quitting a Job

- o The voluntary quit sanction is lengthened from a 60-day to a 90-day household disqualification.
- o Public employees who are dismissed from their positions because of participation in a strike are deemed to have voluntarily quit.

Sec. 159 Parents and Caretakers of Children

- o This provision deletes the work registration exemption granted to a parent/caretaker of children when another parent/caretaker in the household is registered for work.

Sec. 160 Joint Employment Regulations

- o This provision deletes the requirement for joint USDA/Department of Labor publication of work registration regulations.

Sec. 162 Alternative Issuance System

- o USDA may require States to employ alternative issuance systems to improve program integrity.
- o The costs of an alternative system may not be imposed on retailers.

Sec. 165 House-to-House Trade Routes

- o USDA may limit the authorizations of house-to-house trade routes to improve program integrity.

Sec. 166 Approval of State Plan

- o This provision removes USDA's authority to review and approve State forms, instructions, and other materials.

Sec. 167 Points and Hours of Certification and Issuance

- o This provision removes USDA's authority to establish minimum standards for the location and hours of operation of certification offices and issuance outlets.

Sec. 168 Authorized Representatives

- o This provision removes the right of any household to use an authorized representative.
- o USDA is authorized to establish criteria and special verification standards for authorized representatives, including a limit on the number of households a representative can serve.

Sec. 169 Disclosure of Information

- o Information from applicants may be shared with other Federal assistance programs and Federally-assisted State programs.

Sec. 171 Prompt Reduction or Termination of Benefits

- o State agencies may immediately reduce or terminate benefits (without normal notice of adverse action requirements) based on clear written information from households.

Sec. 172 Duplication of Coupons in More than One Jurisdiction Within a State

- o States must periodically verify that no individual receives benefits in more than one jurisdiction.

Sec. 173 Certification System

- o Two of the four previous joint processing requirements are made optional to States: joint food stamp/public (or general) assistance application forms and using public (or general) assistance casefile information as much as possible for food stamp certifications.

Sec. 174 Cashed-Out Programs

- o States must verify at least annually that SSI recipients in SSI cash-out States and participants in cash-out demonstration projects do not also receive coupons.

Sec. 175 Amount of Penalty and Length of Penalty

- o Disqualification penalties for violations by retailers or wholesalers are set at 6 months to 5 years for the first offense, 1 to 10 years for the second offense, and permanently for the third offense or for trafficking in coupons or ATP's.
- o The maximum amount of a civil money penalty is raised from \$5,000 to \$10,000.

Sec. 176 Bonds

- o USDA may require retailers or wholesalers that have been disqualified or fined to post bonds against the value of future violations.

Sec. 177 Alternative Means of Collection of Overissuances

- o States are authorized to use collection methods other than cash repayment or allotment reduction to recover claims against households (except those based on State agency error).

Sec. 178 Claims Collection Procedures

- o States must reduce the allotment to a household of a disqualified member if the household has not elected to pay its claim in cash within 30 days of the State's notifying the household of the claim.

Sec. 179 Cost Sharing for Collection of Overissuances

- o The prohibition against States retaining a portion of recoveries of overissuances caused by State agency error is reiterated.

Sec. 181 Employment Requirement Pilot Project

- o USDA is authorized to conduct demonstration projects in which unemployed able-bodied persons would become ineligible for benefits unless they participated in workfare or met other exemption criteria.

Sec. 182 Benefit Impact Study

- o USDA is required to evaluate the effects of food stamp benefit reductions caused by 1981 and 1982 legislation and the impact of monthly reporting and retrospective budgeting.
- o An interim report to Congress is due by February 1, 1984, and a final report by March 1, 1985.

Sec. 183 Authorization for Appropriations

- o The program is reauthorized through Fiscal Year 1985.
- o Funding caps are set at \$12.874 billion for Fiscal Year 1983, \$13.145 billion for Fiscal Year 1984 and \$13.933 billion for Fiscal Year 1985.

Sec. 184 Puerto Rico Block Grant

- o The Puerto Rico Nutrition Assistance Program must switch to noncash benefits by October 1, 1983.
- o USDA must evaluate the nutritional and economic impact of cash benefits under the Nutrition Assistance Program. A report to Congress is due by March 8, 1983.

Sec. 185 Similar Workfare Programs

- o USDA workfare regulations must permit State and local agencies to operate food stamp workfare as consistently as possible with other workfare programs.

Sec. 186 WIN Participants

- o The workfare exemption for WIN registrants participating at least 20 hours a week becomes optional to the State.

Sec. 187 Hours of Workfare

- o The maximum weekly number of workfare hours per participant is raised from 20 to 30.

Sec. 188 Reimbursement for Workfare Administrative Expenses

- o Workfare operators are to receive enhanced Federal administrative funding based on program savings achieved through job placements. Operating agencies may receive up to 150 percent of the savings resulting from increased earnings in the first month of employment after workfare.

APPENDIX B

ANALYSIS OF DATA FROM THE FOOD STAMP QUALITY CONTROL SAMPLES

Under the Food Stamp Quality Control (QC) program, a series of samples are drawn from the case records of the Food Stamp Program at various intervals, in order to verify benefit computations and compute error rates. Subsets of these samples, which typically consist of about 7000 case records, are also compiled for purposes of analysis. These subsamples constitute a series of nationally representative cross-sectional microdata files containing fairly complete information on the benefits, incomes, and demographic characteristics of selected food stamp recipient households. These files, therefore, may be used to analyze changes in the food stamp recipient population over time, as well as to examine the relationships between recipients' benefit levels and their incomes and demographic characteristics at particular points in time.

Two major aims in analyzing the data from the QC files were, first, identifying the impact of changes in the income and demographic characteristics of recipients on benefit levels in general, and second, estimating the specific impacts on benefits of changes in the Food Stamp Program enacted in 1981. The relationships between benefit levels and recipient characteristics have some inherent interest for those concerned with issues such as who is served by the Food Stamp Program and how well benefits are targetted to particular population and income groups. In addition, however, estimates of the marginal impacts of these variables on benefit levels, all else held constant, may be used in projecting expected changes in benefit levels when recipient incomes and other characteristics change. For

example, estimates of this type can be used to predict the impact on food stamp expenditures of certain projected changes in the demographic structure of the caseload, such as increases in the numbers of children receiving benefits.

The second, more specific set of issues investigated using the QC data have been the impacts of changes enacted under the Omnibus Budget Reconciliation Act of 1981 on the characteristics of the food stamp recipient population and on food stamp benefit levels. In exploring the impacts of OBRA, a particular effort was made to separate out its direct effects on benefit levels from indirect effects caused by changes in the population receiving food stamps.

In addition to direct changes in the Food Stamp Program under OBRA, two major factors operating in the 1981-1982 period had some effect on the composition and incomes of the food stamp recipient population: changes in eligibility and benefit determination rules for cash transfer programs such as Aid to Families with Dependent Children (AFDC), and changes in earnings and employment opportunities resulting from the fact that the economy as a whole was in a state of recession. It is very difficult to determine the relative impacts of each of these factors, or even to know whether they tended to reinforce each other or to cancel each other out. Within the context of the QC analysis in particular such determinations are especially difficult, because the QC sample contains information only on the population actually receiving food stamp benefits at a given point in time, and not on persons potentially eligible for benefits or on the low income population in general. For this reason, the analysis of the OBRA changes using the QC files has concentrated on the examination of the overall changes in benefit levels, including changes caused by changes in caseload composition. For the most

part, however, analysis of the underlying causes of the caseload changes found has been left for other parts of the study, where more directly relevant data are available.

Creation of an Analysis File

Because a major focus of this analysis was the impact of OBRA, and because the most recent QC samples provide data that are more directly comparable across time than are data from earlier samples, the analysis concentrated on data from the August 1981, February 1982, and August 1982 QC files. Although Quality Control surveys were also conducted in 1983, the 1983 data were not yet available at the time when these analyses were performed. Preliminary summary statistics from February 1983 are reported in Chapters III, IV and VI.

In order to examine caseload composition issues using these QC data, it was necessary first to merge data from the different surveys into a single analysis file, and to verify the statistics produced using that file against caseload and benefit statistics published by FNS. The analysis file that was created consists of data from the August 1981, February 1982, and August 1982 QC files and includes primarily variables describing the incomes, benefits and demographic characteristics of food stamp recipient households. After the file was constructed, sets of simple bivariate cross-tabulations were performed and checked against the tabulations of relevant variables published by FNS, in order to validate the output. As a result of this verification process, it was found that although the results were in general close to those published by FNS, in some cases slightly different definitions for particular variables had been used, resulting in small discrepancies between these totals for certain variables and those found by FNS. For the most part, these differences were the result of differences in the way missing data were

treated in compiling totals for certain variables. It was found that the totals arrived at by FNS could be duplicated by going back to the analysis file and recomputing the variables using FNS' definitions, which typically were somewhat broader. For the analytic purposes of this project however, it was believed that narrower definitions that excluded a larger proportion of cases with missing information were somewhat more useful. As a result, therefore, totals on the analysis file for particular subgroups within the population do not always match those in published FNS data sources. Table B.1 shows the comparative totals for several key variables.

Changes in Recipient Incomes and Food Stamp Benefits Over Time

The first major focus of the analysis of the QC data was an examination of changes in recipient incomes and food stamp benefits over time. The observed changes in mean incomes and benefits can be divided into two categories: those caused by changes in the mix of characteristics within the recipient population, and those caused by changes in mean incomes and benefits within categories of recipients. Tables B.2 through B.4 address these two issues. Table B.2 shows the sample means and standard errors for gross income, net income, and benefits in each of the three samples, and also shows the percentage of the recipient population in each of three key demographic groups: the elderly, earners, and households with children. Table B.3 provides additional details on the distribution of income and benefits, and Table B.4 shows the distribution of benefits, mean benefits, and mean incomes within each of the three demographic groups.

As Table B.2 illustrates, there were some significant increases in both mean gross and mean net income between February 1982 and August 1982, although the August 1981 to February 1982 changes in the means of these variables were not significant. In addition, the increase in mean benefits seen in February

Table B.1

COMPARISON OF SELECTED VARIABLES FOR AUGUST 1981
AND AUGUST 1982, AS SPECIFIED IN THE FNS QC REPORTS
AND ON THE URBAN INSTITUTE'S QC ANALYSIS FILE

	August 1981				August 1982			
	Number of Cases ^{a/}		Percent of Caseload		Number of Cases ^{a/}		Percent of Caseload	
	QC Report	Analysis File	QC Report	Analysis File	QC File	Analysis File	QC File	Analysis File
Total Caseload	7698	7698	100	100	7487	7208 ^{b/}	100	100
Households with Elderly Members	1611	1611	20.9	20.9	1469	1433	19.6	19.9
Households with Earners	1513	1413	19.7	18.4	1316	1217	17.6	16.9
Households Receiving AFDC	3055	3087	39.7	40.1	3110	3068	41.5	42.6

NOTES: a. In thousands.

b. Excludes cases with benefits equal to or less than zero or without reported benefits amounts. If all cases included, total equals 7487.

Table B.2

ESTIMATED SAMPLE MEANS FOR SELECTED VARIABLES IN THE AUGUST 1981,
FEBRUARY 1982, AND AUGUST 1982 QC SAMPLES

Variable:	August 1981	February 1982	August 1982
<u>Mean Values, in dollars:</u>			
Gross Income	348.88 (3.30)	344.77 (3.20)	358.18 (3.26)
Net Income	195.77 (2.86)	196.59 (2.91)	217.09 (2.94)
Benefits	103.06 (1.00)	108.71 (1.08)	102.65 (1.07)
<u>Percentage of Households with:</u>			
Elderly Members	20.9 (0.55)	18.6 (0.58)	19.9 (0.55)
Earners	18.4 (0.56)	17.1 (0.57)	16.9 (0.57)
Children	56.4 (0.66)	58.6 (0.71)	58.0 (0.68)

NOTE: Values in parentheses are the standard errors of the sample means or proportions, as relevant.

Table B.3

QUARTILE POINTS AND MEANS FOR GROSS INCOME, NET INCOME AND
BENEFITS IN AUGUST 1981, FEBRUARY 1982, AND AUGUST 1982

	Quartile 1	Quartile 2	Quartile 3	Quartile 4	Mean
<u>August 1981</u>					
Gross Income	0-218	218-305	305-447	447-1567	349
Net Income	0-42	42-162	162-294	294-1253	196
Benefit Amount	0-49	49-91	91-148	148-609	103
<u>February 1982</u>					
Gross Income	0-220	220-312	312-444	444-2460	345
Net Income	0-34	34-162	162-293	293-2375	197
Benefit Amount	0-55	55-97	97-153	153-533	109
<u>August 1982</u>					
Gross Income	0-218	218-321	321-465	465-1944	358
Net Income	0-47	47-181	181-322	322-1509	217
Benefit Amount	0-45	45-88	88-146	146-630	103

Table B.4

MONTHLY BENEFITS BY QUARTILE, AUGUST 1981, FEBRUARY 1982, AUGUST 1982:
HOUSEHOLDS WITH SELECTED CHARACTERISTICS

	<u>Households with Elderly</u>			<u>Households with Children</u>			<u>Households with Earners</u>		
	Aug. 81	Feb. 82	Aug. 82	Aug. 81	Feb. 82	Aug. 82	Aug. 81	Feb. 82	Aug. 82
<u>Percent with Benefits in Each Quartile</u>									
1st Quartile	67.0	66.1	77.4	5.5	5.8	5.6	18.3	17.4	13.3
2nd Quartile	23.5	23.7	13.9	18.1	17.0	16.7	26.5	25.4	28.2
3rd Quartile	5.4	6.1	6.4	37.1	39.0	37.9	28.2	26.6	28.2
4th Quartile	4.1	4.1	2.3	39.3	38.2	39.8	27.0	30.6	29.9
Mean FS Benefit	46	45	38	141	147	140	114	126	120
Mean Net Income	183	201	233	239	230	254	335	312	336
Mean Gross Income	329	342	361	407	390	409	562	527	550

1982 does appear to be significant, although mean benefit levels do not seem to be significantly different in the other two samples.¹

The patterns seen in Table B.2 are not characteristic only of the means, but rather are repeated with a few interesting variations throughout the benefit distributions, as Table B.3 indicates. For example, although gross incomes rose slightly in the lower income categories between August 1981 and February 1982, a much larger increase occurred, especially in the upper quartiles, between February and August 1982. Net incomes were also fairly stable in most categories over the first two samples, although for the lowest quartile they actually fell between August 1981 and February 1982. Since the benefit formula is based on net incomes, the relatively low net incomes seen in February resulted in relatively high benefit levels, particularly in the lower quartiles. Similarly, the growth in net incomes seen between February and August 1982 resulted in a decline in benefit levels. Median benefits were \$3 lower in August 1982 than they had been in August 1981, and \$9 lower than they had been in February. As seen earlier, the change in average benefits was less--under 50 cents between the two August samples--but the mean in August 1982 was as high as it was only because of the presence of some households with unusually high benefits in that sample. The quartile points defining all three of the lowest benefit quartiles were lower in August 1982 than in either of the earlier periods.

Overall, however, differences between the means and especially, the differences between the estimated sample proportions for different demographic groups within these samples are relatively small, compared to the estimated

1. For details on the calculation of standard errors and measures of statistical significance for these samples, see the Analysis Report of November 20, 1984 entitled "The Computation of Standard Errors for the Food Stamp Quality Control Samples."

standard errors. For these groups, only the proportion of earners, among all those examined, is significantly different (at the 95 percent confidence level) in the August 1982 sample and in either of the other two.

Impacts of Recipient Characteristics on Incomes and Benefits

To some extent, the distributional patterns seen for benefits and incomes for the samples as a whole are repeated when mean incomes and benefits within population subgroups are considered, although with some interesting differences, as Table B.4 shows. For example, both gross and net incomes rise across time for households with elderly members, on average, but for both earners and households with children mean gross and net incomes were lower in the February sample than in either of the August ones. This finding is particularly striking for earners, and is significant at the 99 percent level. The patterns seen for incomes are for the most part mirrored in the benefit distributions, which in general are the inverse of the income distribution patterns. The tendency of benefit levels in the February sample to be high relative to incomes is also reflected in the patterns within groups. For example, although both gross and net incomes for the elderly were higher in the February sample, on average, than in the August 1981 sample, benefits were essentially the same.

To some extent, the variations in mean gross and net incomes seen for the various demographic groups shown in Table B.4 are artifacts of differences in the distribution of benefits received from the transfer programs other than food stamps for which these groups are eligible. As Table B.5 shows, for example, the incomes of those receiving benefits from the major transfer programs serving the elderly--Social Security and Supplemental Security Income (SSI)--rose steadily, on mean, over the period. AFDC recipients, on the other hand, experienced a small dip in their gross incomes between August 1981 and

Table B.5

BENEFITS BY QUARTILE, AUGUST 1981, FEBRUARY 1982, AUGUST 1982:
HOUSEHOLDS RECEIVING BENEFITS FROM SELECTED PROGRAMS

	SSI Recipient Households			Social Security			AFDC		
	Aug. 81	Feb. 82	Aug. 82	Aug. 81	Feb. 82	Aug. 82	Aug. 81	Feb. 82	Aug. 82
<u>Percent with Benefits in Each Quartile</u>									
1st Quartile	59.8	66.9	69.7	58.3	61.7	61.3	6.1	5.2	5.1
2nd Quartile	24.4	17.3	16.3	20.4	16.1	17.4	20.9	18.9	26.5
3rd Quartile	9.5	8.7	7.9	10.9	11.4	12.3	38.3	42.0	39.8
4th Quartile	6.3	7.0	6.0	10.4	10.8	8.6	35.5	31.9	36.2
Mean FS Benefit	56	54	45	62	64	56	135	138	135
Mean Net Income	195	226	243	229	251	281	229	244	235
Mean Gross Income	345	364	376	376	393	410	388	384	392

February 1982, while their net incomes remained exactly the same, on mean, across the two samples. Clearly, these patterns are highly correlated with the patterns seen within the corresponding demographic groups.

Table B.6 seems to indicate, however, that the patterns of income receipt in Tables B.4 and B.5 are not solely a reflection of changes in benefit levels in the cash benefit programs; mean AFDC benefits, for example, are not significantly different across the three samples, and do not dip in February as do mean incomes of AFDC recipients. Mean earnings, on the other hand, do decline significantly in the February sample. Since between 8 and 13 percent of the AFDC recipient households in the QC samples have earnings as well, this dip in earnings may help to account for the slight decline in the mean incomes of AFDC recipients seen in Table B.5, as well as the fall in the incomes of earners seen in Table B.4. In all likelihood, this decline in earnings resulted primarily from the effects of the recession, rather than from the changes in the treatment of AFDC recipients with earnings that were enacted as part of OBRA. Although OBRA changes would have gone into effect by February 1982, the reductions in benefits for earners took place only after a 4 month waiting period, which probably would not yet have been over for most recipients. In addition, data from the AFDC QC surveys indicate that the initial impact of the OBRA changes on AFDC recipients with earnings was to reduce their benefit levels, rather than their earnings. (In other words, if there was any impact on work incentives for AFDC recipients under the OBRA amendments, it does not appear to have taken effect immediately.)

For those receiving Social Security and SSI, mean benefit amounts rose slightly between August 1981 and February 1982, and there were significant increases between February and August 1982. These increases are presumably a major contributing factor in explaining the relatively large increases in the

AVERAGE MONTHLY INCOME RECEIVED FROM VARIOUS SOURCES,
FOR THOSE WITH SOME INCOME FROM SOURCE--
AUGUST 1981, FEBRUARY 1982, AND AUGUST 1982

<u>Average Income From:</u>	<u>Sample</u>		
	<u>August 1981</u>	<u>February 1982</u>	<u>August 1982</u>
Earnings	452	422	450
AFDC	284	289	292
Social Security ^a	290	292	313
SSI	181	185	198
<u>Percentage with Income from Source</u>			
Earnings	18.4	17.1	16.9
AFDC	40.1	44.5	42.6
Social Security ^a	23.1	22.7	24.0
SSI	18.7	17.0	18.0

a. Includes Civil Service Retirement, Railroad Retirement, and other pension income.

gross incomes of the elderly between February and August 1982 shown in Table B.4.

The patterns of impacts of changes in recipient characteristics suggested by tables B.2 through B.6 are for the most part confirmed by the results of the regression analysis performed on the QC data. Before turning to a discussion of these results, however, it is necessary first to describe briefly the model used in determining the impact of recipient characteristics on food stamp benefit levels.

Specification of Regression Analyses

Regression equations were specified in two different ways for the analysis of the impacts of recipient characteristics on benefit levels--using primarily demographic variables, such as numbers of children in the household, presence of elderly household members, and so forth, and using variables relating to the economic characteristics of households, such as AFDC reciprocity, Social Security reciprocity, and other variables of this type. Obviously, there will tend to be strong correlations between these economic and demographic variables, since the demographic factors are in most cases the determinants of eligibility for the cash benefit programs in question. For example, in this population, presence of children in the household and receipt of AFDC benefits are almost entirely coincident factors and one clearly would not wish to include both variables in any given regression equation. There is no a priori reason to assume, however, that one form of this variable pair will be more significant in explaining benefit levels than the other. Both versions of the model, therefore, were examined, and were found to produce very similar results. (Only the second version is discussed in detail here, in order to avoid unnecessary repetition.)

In examining the impacts of receipt of benefits from other programs and other sources of income on food stamp benefits, the focus has been on issues of reciprocity rather than on the amounts received. For all regressions, the dependent variable examined was the level of food stamp benefits. This level is largely determined by income since food stamp benefits are reduced by about 30 cents for each additional dollar of household income. Further, most recipients receive all or almost all of their income from a single source. Regressing income amounts against benefits, therefore, will simply result in a regression coefficient of approximately .3, which is the benefit-reduction rate for food stamps. (The only income type for which this does not hold is earnings, which, because the earnings deduction is specified in percentage terms and is automatically given to all earners, bears a slightly more complex relationship to benefit levels.) Specifying the equations so as to include only flags indicating benefit reciprocity rather than amounts received, therefore, provided somewhat more interesting information--namely, the impact of a marginal change in the proportion of the sample receiving benefits from other programs on food stamp benefit levels. The equations were also then used to answer other questions such as what proportion of the change in benefit levels between August 1981 and February 1982 was attributable to the change in the number of AFDC recipients.

Independent variables included in the pooled regression equations discussed here, therefore, were HHSIZE (household size); ELDFLG (variable indicating the presence of elderly persons in the household); EARNER (variable indicating the presence of at least one earner in the household); AFDCFLG (variable indicating AFDC reciprocity); SOCSECFLG (variable indicating Social Security reciprocity); SSIFLG (variable indicating SSI reciprocity); PRESKIDS (variable indicating the presence of pre-school aged children in the

household); FHEAD (variable indicating the presence of a female household head); and two dummy variables indicating sample date. The dependent variable for all the regression specifications tried was the reported household benefit level.

Regression Results

As Table B.7 shows, all the variables discussed above were significant predictors of household benefit levels, with the exception of the dummy variable for the February 1982 sample. The largest single effect was related to the presence of an earner in the household, which lowered average household benefits by about \$37 on average, all else held constant. Other large coefficients were related to Social Security reciprocity, which reduced average benefit levels by almost \$32, all else held constant, and household size--each additional household member appears to increase benefit levels by about \$32 on average, all else held constant. AFDC reciprocity and SSI reciprocity, like Social Security, had a negative impact on benefit levels, of about \$15 and \$24 respectively.

Interestingly, the impacts of variables such as ELDFLG and FHEAD were quite small (although still significant) relatively speaking, once benefit reciprocity was controlled for. (In the version of the model including only demographic variables, the coefficients for these variables were much larger, indicating that they were picking up some of the benefit reciprocity effects.)

The variable PRESKIDS was included on the hypothesis that, holding constant household size and benefit reciprocity status, the presence of younger children in the household was likely to result in lower gross incomes (largely because earnings opportunities were likely to be more limited) and thus higher benefits. As Table B.7 shows, the results tended to confirm this hypothesis.

Table B.7

IMPACTS OF RECIPIENT CHARACTERISTICS ON
HOUSEHOLD BENEFIT LEVELS: REGRESSION COEFFICIENTS
FOR THE POOLED AUGUST 1981, FEBRUARY 1982,
AND AUGUST 1982 QC SAMPLES

All Dates		
$R^2 = .69$		
HHSIZE	31.8	**
ELDFLG	-6.6	**
EARNER	-37.0	**
AFDCFLG	-14.6	**
SOCSECF LG	-31.7	**
SSIFLG	-23.6	**
PRESKIDS	10.0	**
FHEAD	4.1	**
FEB82	1.4	--
AUG82	-4.0	**

NOTE: ** Indicates variable is significant at a 99% confidence level.

The two final variables included in this regression were dummies for the later two sample dates. Their results were quite interesting--as Table B.7 indicates, the coefficient for the February 1982 dummy was positive but both small and insignificant, while the coefficient for August 1982 was negative, somewhat larger, and highly significant. Overall, this regression indicates that being in the February sample increased average benefits by slightly over a dollar, relative to the August 1981 sample, and that being in the August 1982 sample reduced benefits relative to August 1981 by about \$4, all else held constant. These estimates are consistent with calculations made earlier in this project, which were based on simple tabular data.

Summary of Results from the QC Analysis

In summary, recipient characteristics, and particularly those related to receipt of cash benefits and of earnings, do have a major impact on food stamp

accounts for a large proportion of the total variation in food stamp benefits. Household size, the presence of earners in the household, and for

approximately \$6 that occurred in mean benefits between August 1981 and February 1982 is almost completely explained.

Between August 1981 and August 1982, there was almost no change in mean benefit levels in the Food Stamp Program. There were some significant changes in the characteristics of recipients, however--for example, a decline in the proportion of the sample with earnings or with AFDC benefits--that, all else held constant, should have caused mean benefits to rise slightly. Thus, if these changes in recipient characteristics are controlled for, there is a small but significant negative coefficient for the August 1982 dummy, which indicates that benefits for that sample were about \$4 lower than would have been expected based on the composition of the recipient population and the relationships obtaining in the earlier two samples. Some of this difference may be due to increases in the average level of earnings or cash benefits for those who received income from these sources over this period, but, except in the case of Social Security and SSI benefits, these changes were small and in all cases they were neutral or even negative in real terms.

It is probable, therefore, that at least part of this rather small decline in relative benefits was due to the impact of the OBRA changes on food stamp benefits. The lack of impact of these changes in the February sample seems to result largely from the failure of recipients' nominal incomes to rise over the August 1981 to February 1982 period. This flat income profile was a result both of the recession, which reduced mean earnings, and of the fact that COLAs in the cash benefit programs do not normally occur during this period.

In conclusion, then, changes in recipient characteristics across samples, which for the most part probably were not highly correlated with the OBRA changes in food stamps, were largely responsible for the changes in mean

benefit levels seen over this period. By August 1982, however, there does appear to have been a small decline in benefit levels, all else held constant, which was probably associated, at least in part, with the changes enacted under OBRA. This impact might have been somewhat larger, and might have occurred earlier, if recipients' incomes, and especially, earnings levels, had not been held down by the recession. As it was, however, the demonstrable impact of OBRA on the level of food stamp benefits in this period, while perceptible, appears to have been quite small.

Additional Estimates of the Impacts of the Legislation

In addition to the regressions done specifically for the analysis of the QC files, some additional calculations were made to arrive at the results reported in Chapters III and IV of this report. As discussed above, the regressions done for this analysis found a \$4 decline in benefits between August 1981 and August 1982 which was attributable, at least in part, to the OBRA legislation. Since there was no actual change in average benefits over this period, this implies that the caseload composition changes being controlled for in these regressions would have caused benefits to rise by \$4 in the absence of the OBRA changes. As it was, however, the \$4 decline due to OBRA and the \$4 increase due to caseload composition changes almost exactly offset each other.

The regression equations discussed above controlled only for characteristics of food stamp recipients, however, and not for changes in their gross incomes. For most groups, this made very little difference over the August 1981 to August 1982 period, since there were few significant changes in gross incomes. The only group for whom changes in income caused major changes in benefit levels over this period, in fact, were the elderly,

whose gross income rose from an average of \$329 to \$361 per household, resulting in a decline in their average benefits from \$46 to \$38.

Since it was believed that the August 1982 dummy might be picking up the effects of some of these income changes as well as of the legislative changes, and since the evidence was strong that the income changes were not related to OBRA, a simple calculation was performed to estimate the impacts of the changes in the income and average benefits of the elderly on average benefits for the population as a whole (holding constant compositional factors). Specifically, average benefits for August 1982 were recalculated, using the sample proportions for elderly and non-elderly households that actually obtained in 1982, but substituting in the average benefits that each group would have received based on their 1981 gross incomes. Since the benefit formula did not change over this period, this in effect meant using each group's average benefit in 1981, weighted by their sample proportion in 1982, to calculate average benefits for the population. This calculation gave an average for 1982 as it would have been with the 1982 caseload composition, but with average benefits for each group that reflected their 1981 rather than 1982 gross incomes.

Under this calculation, it was found that average benefits for the population as a whole would have been about \$1 higher in August 1982 if the gross incomes of the elderly had not risen over the August 1981 to August 1982 period. It was estimated, therefore, that about \$1 of the \$4 decline in benefits that was picked up by the August 1982 dummy in the regression equations was actually due to income changes rather than to OBRA. Adjusting for this \$1 income-related effect lowered the estimated impact of OBRA on average benefits to about \$3.

Finally, as discussed in Chapter III, all of these estimates represent changes in nominal benefit levels during the August 1981 to August 1982 period. Because prices were rising somewhat over this period, however, real benefits--that is, benefits adjusted for inflation--actually fell somewhat more than did nominal benefits. In order to estimate this decline in real benefits, the average nominal benefit level that would have been needed in August 1982 to maintain the same average real benefit as in August 1981 was calculated, and was found to be between \$106 and \$107. (Since food stamp benefits can only be used to purchase food, the Consumer Price Index for food, rather than for all consumer goods, was used in making this calculation.) This was compared to nominal benefits in August 1982, adjusted for caseload composition and income changes.

As seen above, if the caseload composition in August 1982 had been the same as it was a year earlier, but all else had been the same as in August 1982, average benefits would have been about \$4 lower than they actually were (in other words, demographic changes increased average benefits by about \$4.) Without these caseload changes, therefore, average benefits in 1982 would have been about \$99, or \$7 to \$8 below the amount needed to maintain real benefits at their 1981 levels. This calculation, however, does not take into account the increase in gross incomes for the elderly discussed above, which was estimated to reduce average benefits in August 1982 by about \$1. If this reduction due to income changes had not occurred, therefore, average benefits would have been about \$1 higher in August 1982, or about \$100 after adjusting for both caseload composition and income changes. This adjusted average benefit estimate is about \$6 to \$7 lower than the amount that would have been needed to maintain average benefits at the same real levels as in August 1981.

In considering these estimates of the changes in real benefits over the August 1981 to August 1982 period, it is important to bear in mind that these estimates solely reflect changes in the purchasing power of benefits over this period, holding constant income and compositional factors. They do not necessarily represent the benefit that food stamp recipients would have received in the absence of OBRA, since the cost of living adjustment that was foregone would have been based on a different reference period, in which price changes were somewhat greater than they were between August 1981 and August 1982.

In other words, these estimates imply that food stamp recipient households would have needed \$6 to \$8 more in benefits on average in August 1982, in order to be able to purchase the same market basket of goods as in August 1981. If cost of living adjustments had occurred under the pre-OBRA schedule, however, real benefits would actually have been higher in August 1982 than in August 1981, because the COLA would have been based on changes in food prices in 1980-1981, which were greater than those between August 1981 and August 1982. Thus, the estimate of the decline in the average purchasing power of benefits adjusted for caseload and income changes derived under the methodology discussed here is not equivalent to an estimate of the impact of the OBRA delay on benefits derived by comparing the August 1982 benefit with a synthetic 1982 benefit that might have occurred if OBRA had not been implemented.

APPENDIX C

ANALYSIS OF FOOD STAMP TIME SERIES DATA

(Net Flows Model)

Overview

This Appendix describes the data and methods employed in the analysis of State food stamp caseload flows. The net flow of cases is defined as the change in the number of cases from month to month and is a function of economic conditions, demographic characteristics of the population, and program parameters. The net flows model contrasts with the macro model estimated by DRI (see Appendix D) in that the macro model focuses on the stock of food stamp cases at a point in time, while the net flows model looks at the change in the caseload from month to month. The purpose behind the net flows model is to obtain estimates of the impact of the 1981 and 1982 OBRA legislation on the Food Stamp Program, holding constant economic and demographic factors. The DRI model has a similar purpose although its main function is to take into account interactions between the economy and the Food Stamp Program. However, the net flows model makes use of more disaggregated data and allows for the incorporation of more complex economic effects.

In particular, the net flows model is characterized by a dynamic perspective on the Food Stamp Program. The change in the caseload at any time is the net of case openings and case closings, and the model therefore includes explanatory variables related to the movement on and off the program. Additionally, the model employs variables which affect the pool of eligible participants in the current period as well as in previous periods to account for lagged effects. For example, the number of case openings may be a

consequence of current AFDC case openings, demographic factors, seasonal factors, and program rules. In addition, current and lagged economic conditions are expected to be important determinants. The Food Stamp caseload is known to be sensitive to the business cycle, and to employment characteristics in particular. High levels of current unemployment are expected to affect case openings with a lag as people exhaust unemployment insurance coverage and personal savings. Hence, it is important to control for contemporaneous as well as lagged economic conditions.

Of major interest in the analysis of the net flows model is the impact of various program policy changes, particularly changes under 1981 and 1982 OBRA legislation. States implemented the various policy changes at different times. Given enough variation in implementation dates, the marginal impact of a policy change on the net flow of cases, holding constant economic and demographic conditions, can be estimated with more confidence. Thus, while the effects of economic and demographic changes are of interest in their own right, primary interest is in estimating the effects of policy changes. Because the net flows model uses micro-data--observations on state-specific variables--the variation in circumstances from state to state is great enough to allow the effects of program changes to be isolated. In the next section the data are described in more detail.

Description of the Data Base

The core data used in this analysis are monthly reports by each state from July, 1969 through April, 1984 on the number of food stamp recipients from the publication "Food Stamp Program: Statistical Summary of Operations."¹ Hence, the data are pooled across states and time periods; for

1. Starting in July, 1982 the data are published only once per quarter, however, a complete set of monthly data was provided by FNS staff.

a given month there are 51 state observations (including the District of Columbia but excluding Puerto Rico).¹

Appended to the basic food stamp data are measures of economic conditions and demographic characteristics. Whenever possible monthly, state-specific variables were used, but, some variables of interest are available only quarterly or annually. For example, the distribution of state population by age is available only on an annual basis, as are certain economic variables, such as per capita personal income. The lack of monthly or quarterly demographic data is not a major problem as these variables change relatively slowly across time. A few variables of interest are not available by state; income distribution is available only for the four census regions and prices are collected for 28 large SMSA's.

Table C.1 summarizes the variables included in the data base grouped according to the major categories of geographic, demographic, economic, and program variables. Descriptive statistics for many of these variables are provided in Table C.2. These are based on data over the period from 1976 to 1983. Much of the preliminary analysis was done on data covering a longer period from 1970 to 1983. However, experiments with disaggregating by time suggested that the determinants of the net flows were significantly different in the later years of the program. The time frame from 1976-1983 was chosen for the final analysis because the program was well-established over that time. Prior to 1976 the program did not exist in all counties in the U.S. Some states initiated a program later than others or delayed moving toward coupon issuance rather than commodity distribution. In general, the early years of the program witnessed periods of rapid growth sometimes caused by

1. In the early years of the program not all states participated so there may not be 51 observations for every month. By 1974 all states had food stamp offices in operation.

Table C.1
 VARIABLES USED IN THE NET FLOW ANALYSIS

<u>Variable</u>	<u>Symbol</u>
Geographic	
FNS Regions:	
New England	N. England
Mid Atlantic	M. Atlantic
Southeast	Southeast
Midwest	Midwest
Southwest	Southwest
Mountain Plains	Mt. Plains
Western	Western
Demographic	
Persons under 5 years of age (000,000's)	POPU5
Persons 5-17 years of age (000,000's)	POP5-17
Persons 18-44 years of age (000,000's)	POP18-44
Persons 45-64 years of age (000,000's)	POP45-64
Persons 65 years or older (000,000's)	POP65P
Average Household Size	HHSIZE
Food Stamp Program	
Quarterly average of the month-to-month change in the caseload of individuals	NET FLOW
Quarterly average of the monthly value of issuance per person	AVGBEN
Deflated average of the monthly value of issuance per person (\$ 1977)	AVGBENR
Number of State Food Stamp Offices	PROJECTS
Maximum monthly Food Stamp Benefit for a 4-person household (\$ 1977)	MAXFSBENR
Elimination of the Purchase Requirement	EPR
1981 OBRA Changes	OBRA81
1982 OBRA Changes	OBRA82

Table C.1 (continued)

<u>Variable</u>	<u>Symbol</u>
Other Programs	
AFDC Case Openings	AFDC OPEN
AFDC Case Closings	AFDC CLOSE
AFDC Maximum monthly Benefit for a 4-person family (\$ 1977)	MAX AFDCBENR
Average SSI monthly benefit for an aged couple (\$ 1977)	AVGSSIR
Average monthly benefit amount for retired workers, disabled workers, and widows (\$ 1977)	AVG SOCSECR
ECONOMIC	
Business Cycle Peak	BC PEAK
Business Cycle Trough	BC TROUGH
Quarter leading the Peak	PEAK LEAD
Quarter leading the Trough	TROUGH LEAD
Per capita Personal Income (000' (\$ 1977--State measured annually)	YPCAPR
Quarterly average of the monthly state unemployment rate	URATE
URATE lagged one quarter	URATE(-1)
Quarterly average of the monthly state insured unemployment rate	IURATE
Ratio of IURATE to URATE	IURATE/URATE
Interaction between URATE and BC PEAK	URATE*PEAK
Interaction between URATE and BC TROUGH	URATE*TROUGH

Table C.1 (continued)

<u>Variable</u>	<u>Symbol</u>
Variables Not in Final Specification	
% of Families with Real Income:	
Under \$2,000	
\$2,000 - \$5,000	
\$5,000 - \$10,000	
\$10,000 - \$20,000	
Over \$20,000	
Average weekly earnings of production workers in manufacturing	
% Distribution of Duration of Unemployment:	
27-51 weeks	
52 weeks or longer	

Table C.2

DESCRIPTIVE STATISTICS -- CONTINUOUS VARIABLES
1976-1983

<u>Variable</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Minimum</u>	<u>Maximum</u>
POPUS (000,000's)	.324	.331	.032	2.008
POP5-17 (000,000's)	.942	.950	.093	4.809
POP18-44 (000,000's)	1.805	1.916	.149	11.299
POP45-64 (000,000's)	.882	.941	.076	4.710
POP65P (000,000's)	.503	.526	.034	2.615
HHSIZE	2.78	.06	2.72	2.89
PROJECTS	61.5	46.6	1.0	254.0
MAXFS	216.44	36.91	166.00	401.00
MAXFS R	176.07	8.95	163.12	258.54
NET FLOW	831	9545	-82811	101810
AVG BEN	33.35	9.79	16.80	238.96
AVG BENR	27.23	5.68	-	-
AFDC OPEN	9138	12359	15	86541
AFDC CLOSE	9180	13492	316	117479
MAX AFDC	327.16	114.84	60.00	625.00
MAX AFDCR	266.30	97.45	60.00	580.79
AVG SSI	136.77	50.12	34.48	564.83
AVG SSIR	109.11	39.91	24.96	590.83
AVGSOCSEC	321.83	67.13	218.40	410.23
AVGSOCSEC R	255.02	7.44	235.60	275.17
CPIALL	1.26	.25	.89	1.64
CPIFOOD	1.23	.21	.89	1.55
YPCAP (000's)	8.727	2.142	4.443	16.409
YPCAPR (000's)	6.927	0.969	4.762	10.320
IURATE	3.69	1.55	.50	10.90
URATE	7.17	2.37	2.23	20.50
URATE(-1)	7.16	2.37	2.23	20.50
UR*PEAK	.42	1.67	0.0	11.23
UR*TROUGH	.52	2.11	0.0	16.20

Descriptive Statistics -- Discrete Variables
1976-1983

<u>Variable</u>	<u>Mean</u>	<u>Sum</u>
N. England	.14	224
M. Atlantic	.14	224
Midwest	.12	192
Southwest	.10	160
Mt. Plains	.20	320
Western	.14	224
Southeast	.16	256
EPR	.63	1007
OBRA 81	.28	449
OBRA 82	.17	186
BC PEAK	.06	100
BC TROUGH	.06	100
PEAK LEAD	.06	100
TROUGH LEAD	.06	100

factors not relevant in more recent years. Confining the analysis to the 1976-1983 period should provide estimates more appropriate to current policy considerations.¹

Graphs depicting the net flows at the national and regional levels provide a historical picture of program change. Figure C.1 shows the quarterly average of the month-to-month change in food stamp caseloads nationally from mid-1969 to late-1983. The erratic nature of the series is visually underscored. For this reason quarterly averages of the monthly net flow were used in the final analysis--the model performed less than satisfactorily at predicting the monthly series but worked well using quarterly averages.²

The two major increases in the net flows are in the fourth quarter of 1974 and in the first quarter of 1979. The former is associated with the general economic slowdown, the latter with the elimination of the purchase requirement. In general, the net flows tend to be related to business conditions and the peaks and troughs of the business cycle are indicated on the graphs.

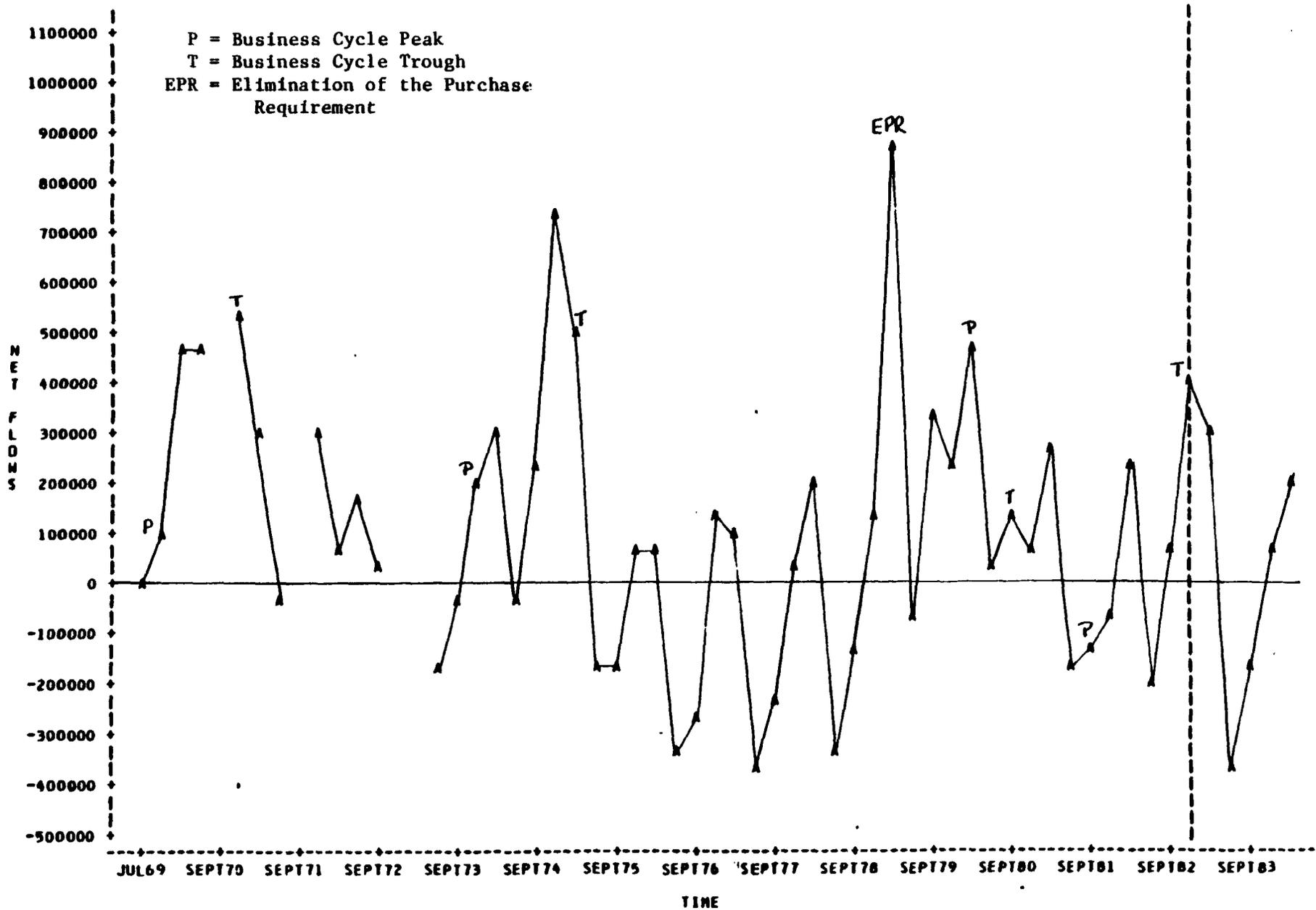
Figures C.2 through C.8 display the regional net flows. The national pattern is essentially repeated across the seven regions. Some minor variations from the norm can be seen but none of these lead to significant regional differences in the change in caseloads.

1. A point of interest is the difference in the average monthly net flow between the two periods. Between 1970 and 1983, the average stood at +1,983 cases but was only +831 cases between 1976 and 1983--a difference which is statistically significant.

2. The practice of "smoothing" a highly erratic series using some sort of averaging procedure is common in economic modeling.

Figure C.1

PLOT OF NATIONAL NET FLOWS BY TIME



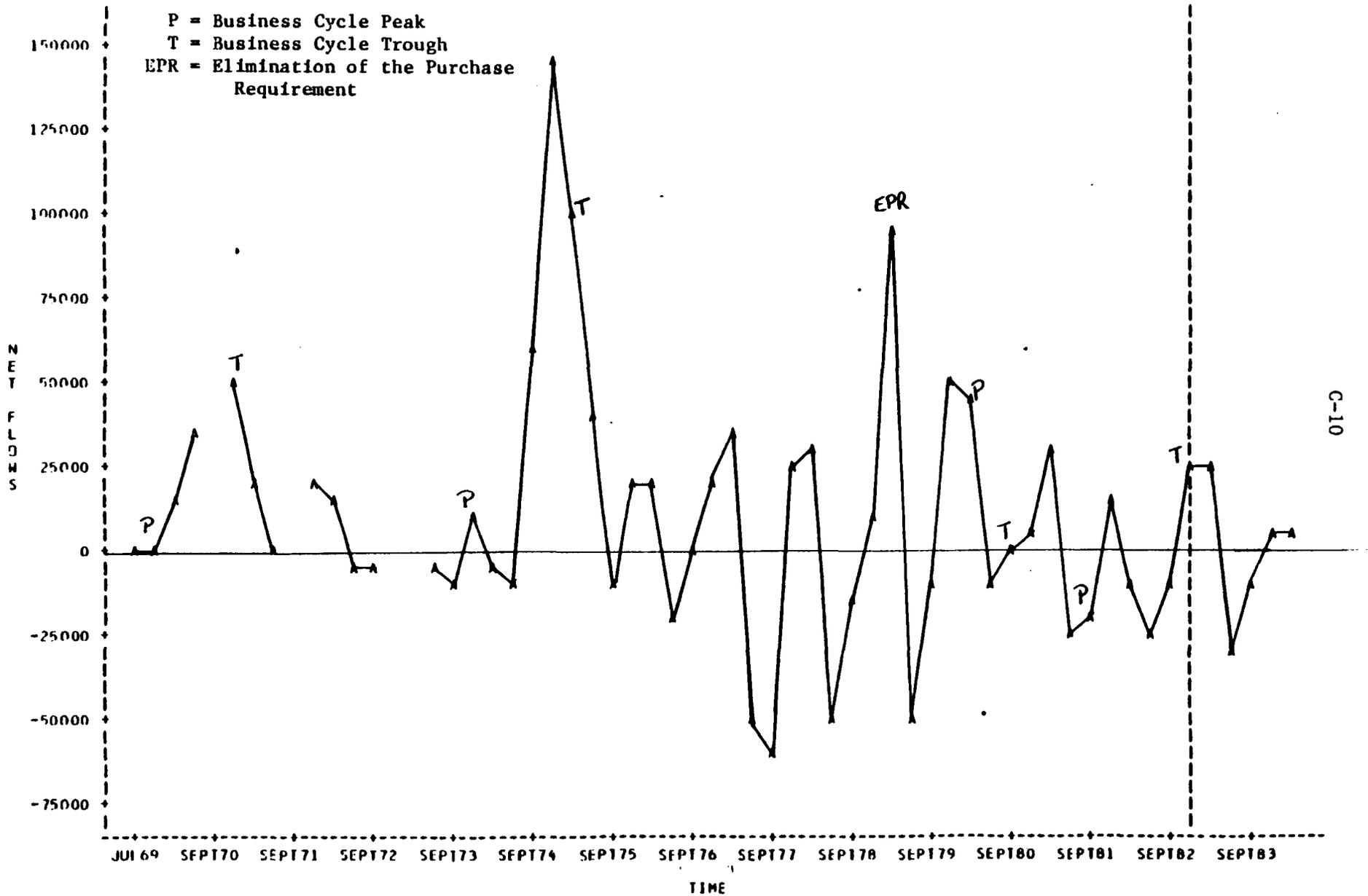
C-9

NOTE: Plot is interrupted where missing data occur.

Figure C.2

PLOT OF REGIONAL NET FLOWS BY TIME

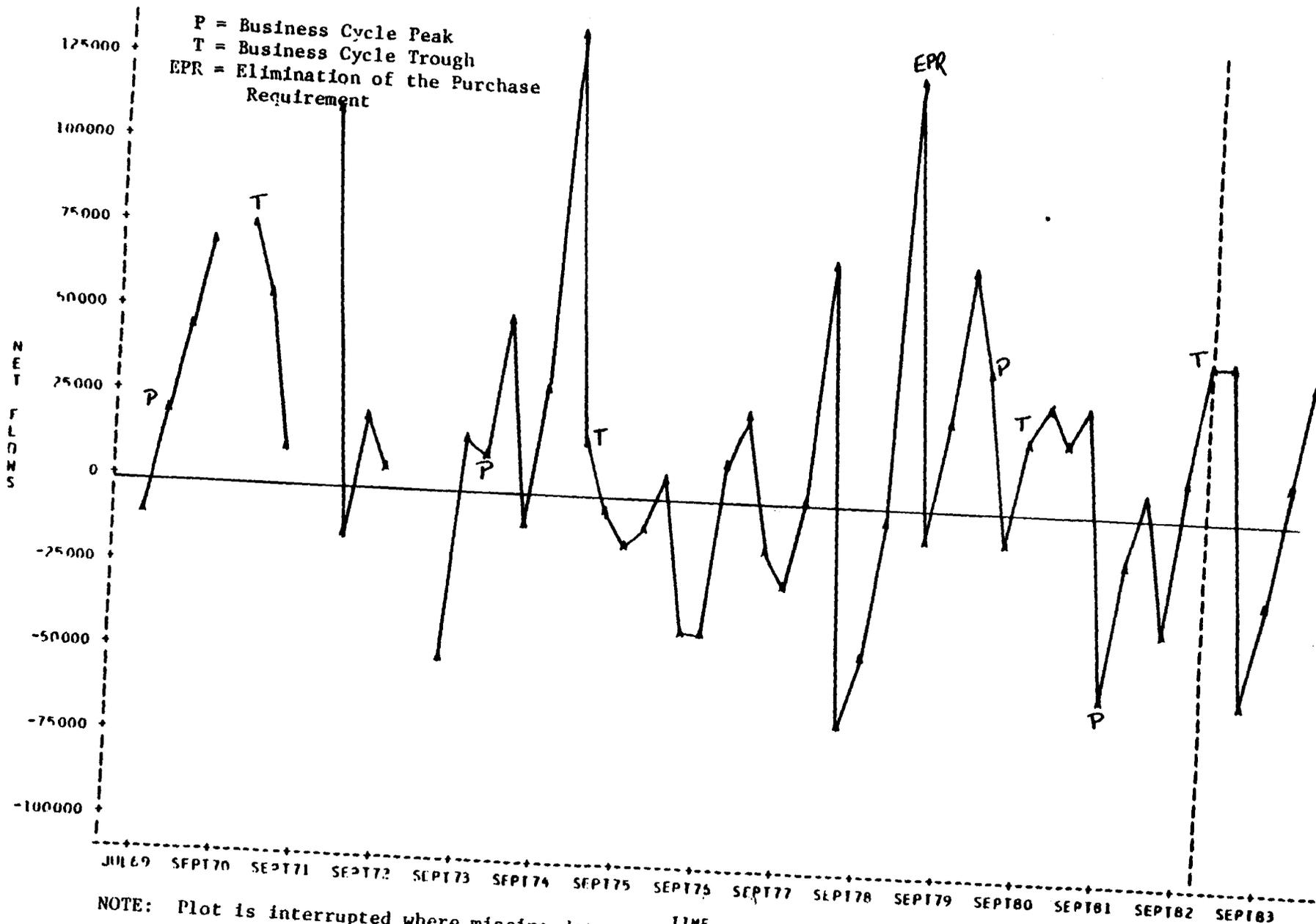
NEW ENGLAND



NOTE: Plot is interrupted where missing data occur.

Figure C.3

PLLOT OF REGIONAL NET FLOWS BY TIME
MID ATLANTIC

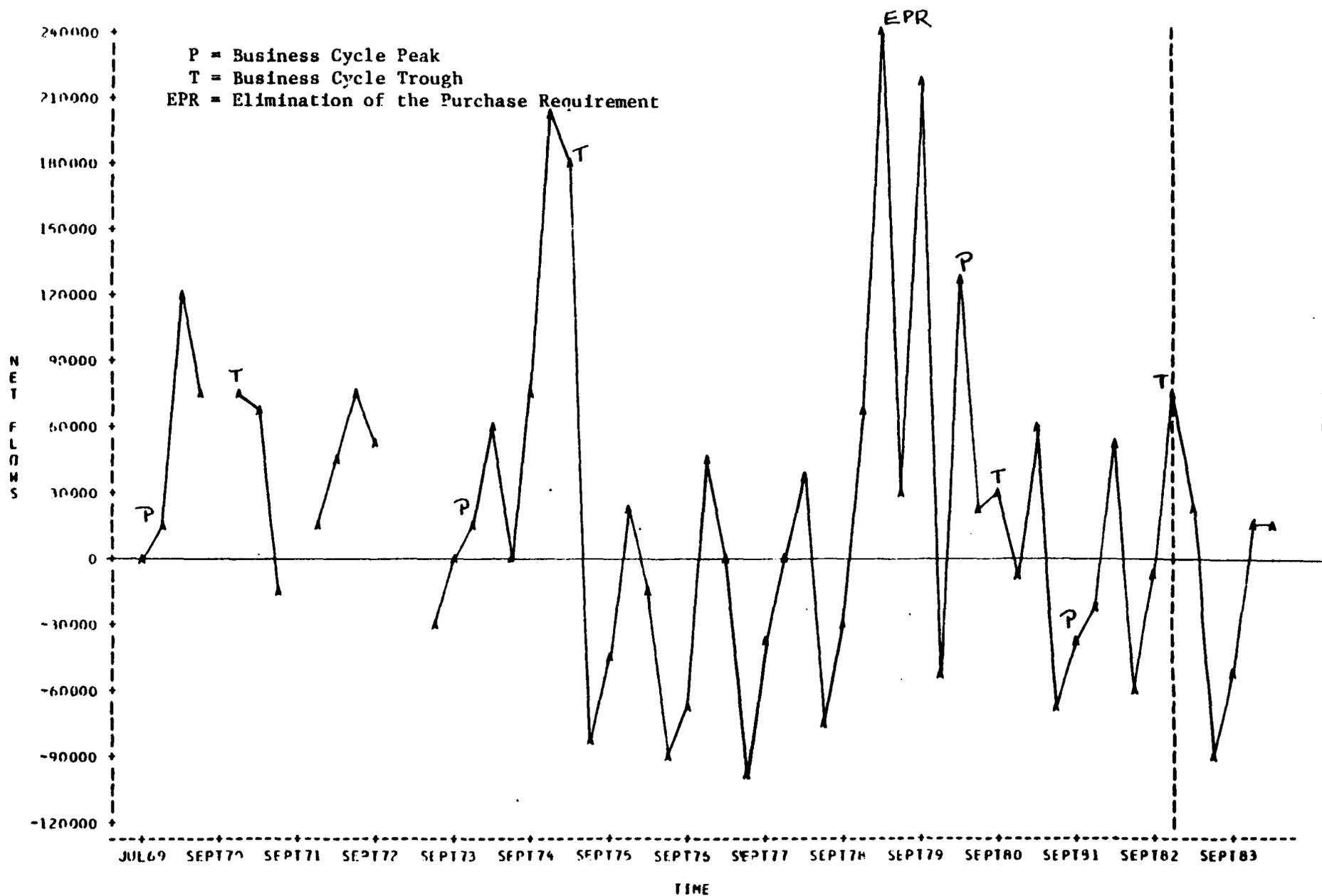


NOTE: Plot is interrupted where missing data occur.

Figure C.4

PLOT OF REGIONAL NET FLOWS BY TIME

SOUTHEAST

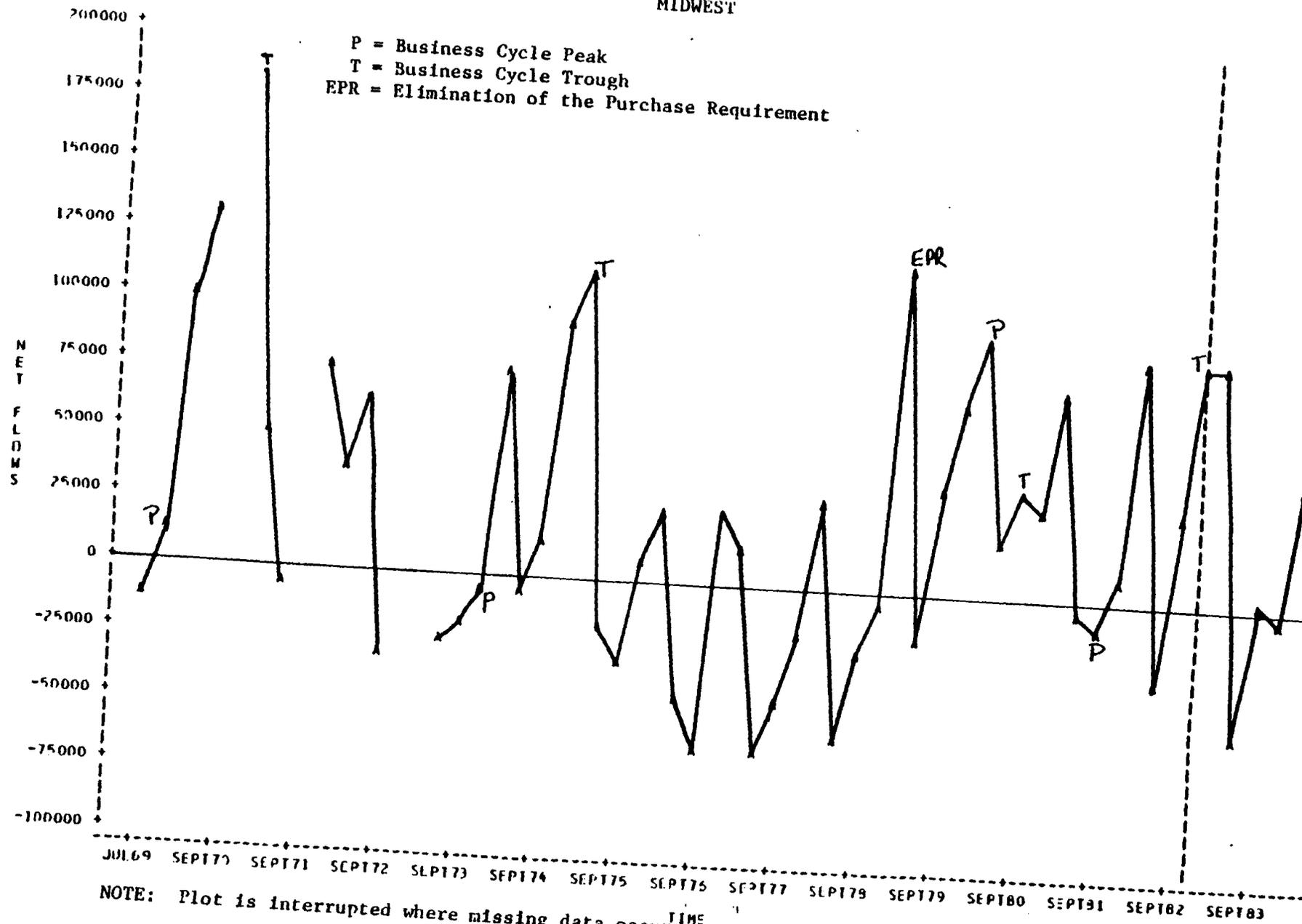


NOTE: Plot is interrupted where missing data occur.

Figure C.5

PLOT OF REGIONAL NET FLOWS BY TIME

MIDWEST



C-13

NOTE: Plot is interrupted where missing data occur.

Figure C.6

PLOT OF REGIONAL NET FLOWS BY TIME

SOUTHWEST

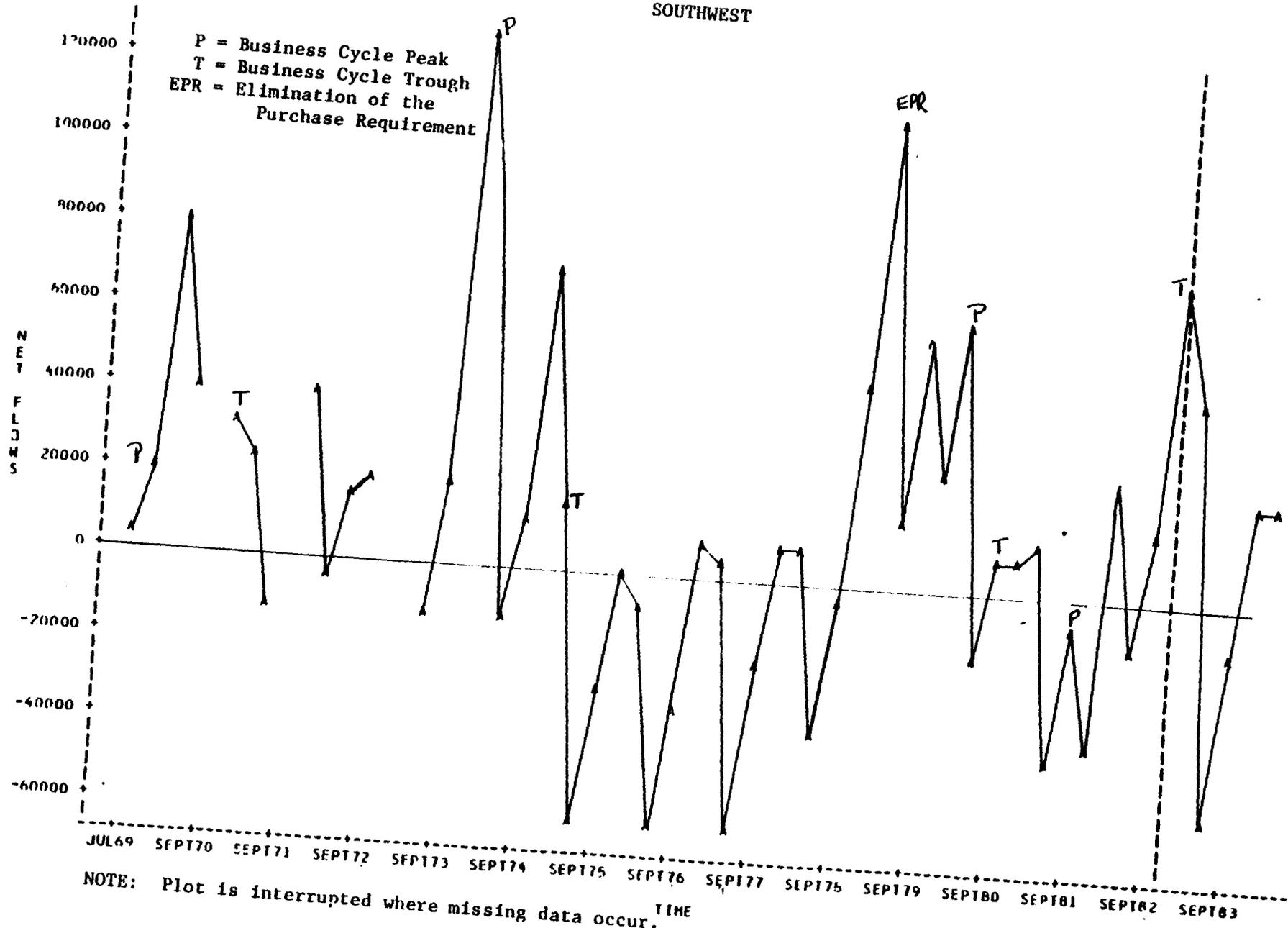


Figure C.7
PLOT OF REGIONAL NET FLOWS BY TIME

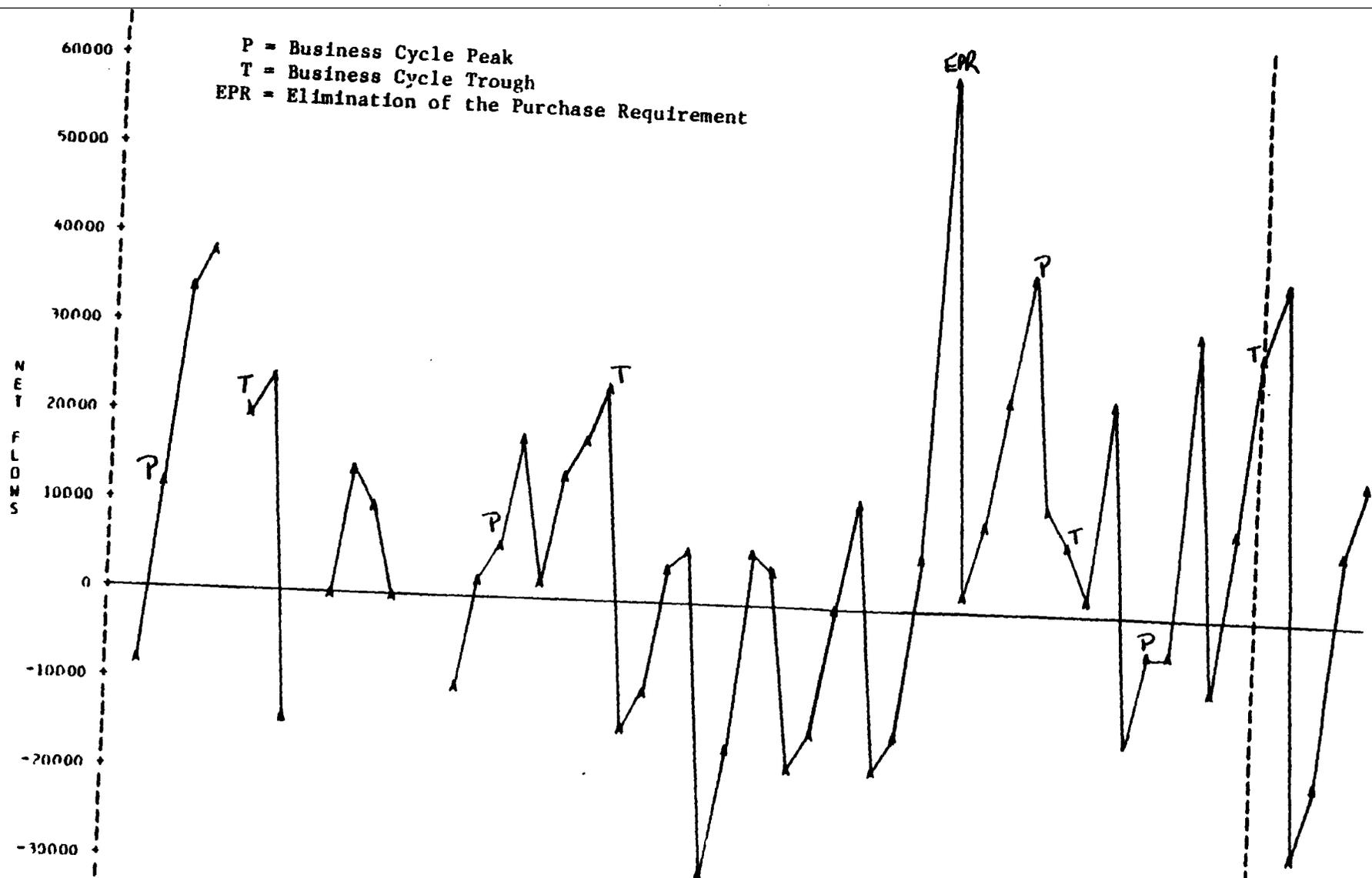
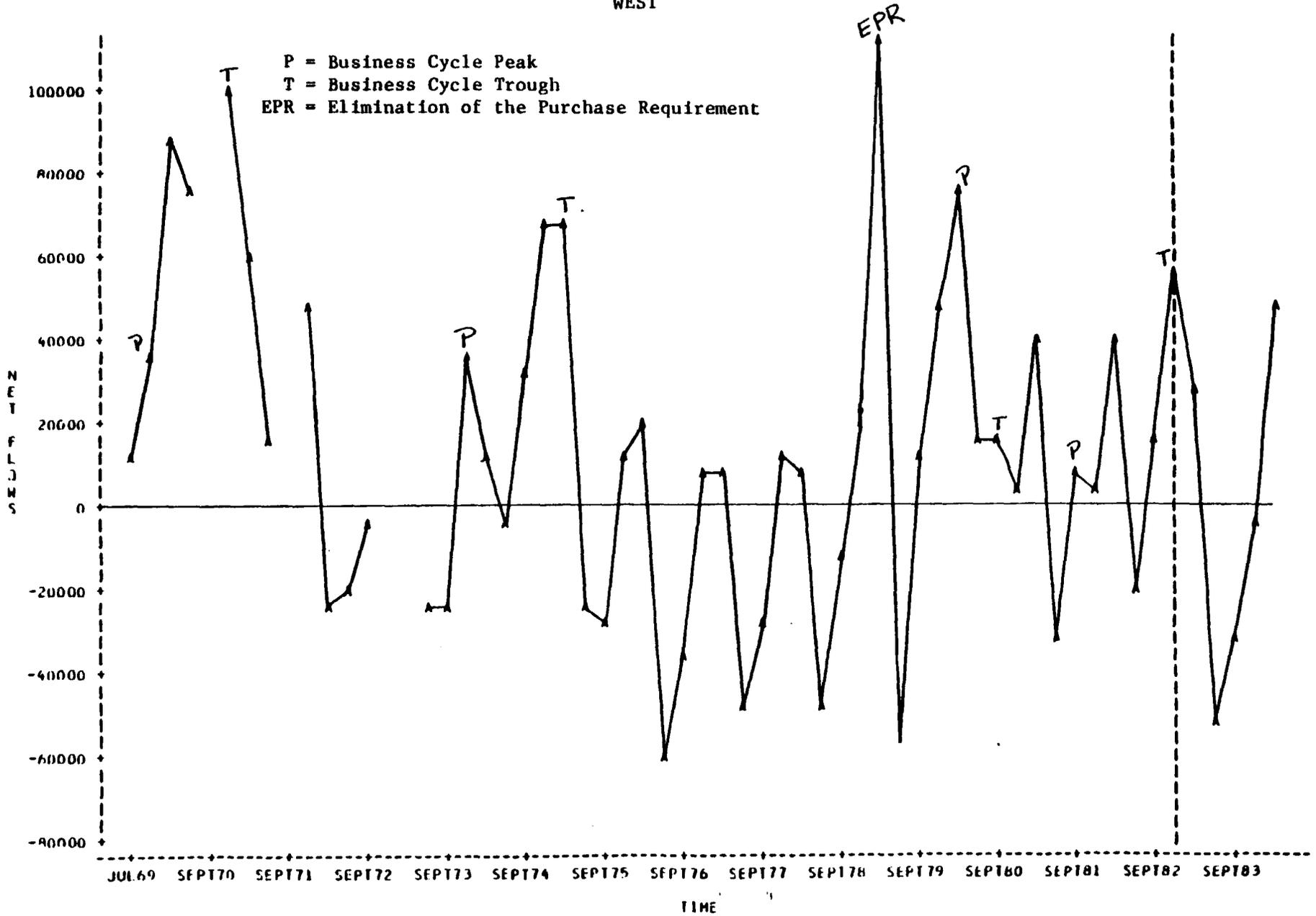


Figure C.8

WEST
PLOT OF REGIONAL NET FLOWS BY TIME

WEST



NOTE: Plot is interrupted where missing data occur.

The Net Flows Model

The conceptual framework on which the net flows model is based is the relationship between the stock of cases, case openings, and case closings and the exogenous factors which presumably affect program participation. Early experimentation with a preliminary statistical model involved ordinary least squares (OLS) regression analysis in which the dependent variable was the quarterly average of month-to-month change in the state food stamp caseload. The final model did not use OLS but employed a more sophisticated error structure to adjust for the complexities of using pooled cross-section and time series data. The explanatory variables for both models were chosen from the group of geographic, demographic, economic, and program variables shown in Table C.1.

The results of the preliminary analysis with OLS suggested that simple geographic effects do not appear to be significant and there is no evidence that economic effects vary significantly across regions. Alternative specifications regarding the economic variables hypothesized to be important showed that the rate of current and lagged unemployment, along with the insured unemployment rate, were critical. Various measures of income, such as average weekly earnings and the distribution of income, did not add significantly to the explanatory power of the model, nor did a measure of long term unemployment duration. The functional form of the relationship between the net flows and unemployment was nonlinear in nature. Finally, there was insufficient variation in the data to obtain estimates of the separate effects associated with the components of the 1981 OBRA legislation. The gross effects of the legislative packages did not appear to be significant.

After finalizing the variable specification, the model was estimated using a technique which takes into account the fact that the data are pooled

across states and across points in time.¹ The results of this estimation are shown in Table C.3. The estimated coefficient associated with each variable is shown along with the t-statistic.

The population distribution by age is significantly related to the net flow. Part of this is a simple size effect--larger populations may be expected to generate a larger net flow of cases. However, age effects are not uniform. Growth in the population under 5 years of age or between 18 and 44 is estimated to have a positive impact on the net flow while a negative impact is associated with growth in the 5 to 17 and over 65 age categories.

The elimination of the purchase requirement had a large, positive effect on the net flow of food stamp cases. AFDC case openings and case closings are directly related to the change in the food stamp caseload. The effects of both measures are in the expected direction and are of the same order of magnitude.

The most significant economic effects on the net flows operate through the measures of unemployment. To estimate the marginal effect of a change in the unemployment rate, all the coefficients associated with measures of URATE must be taken into account. Estimates from the final specification suggest that as the unemployment rate rises, the net flow will rise, but not in a linear fashion. The marginal effect is muted the lower the initial level of the unemployment rate or the higher the insured unemployment rate. In addition, changes in unemployment rates have a lagged effect. If the rate is

1. The statistical model of the net flows can be viewed as a type of "error components" model in which the error structure is comprised of three components. One component is associated with time--observations at one point in time are related to previous observations. A second component is peculiar to cross-section units--all observations from a particular state have some common characteristics. Last, a purely random component. The "error components" estimates are not far different than the ordinary least squares regression estimates although the latter assume a much simpler error structure.

Table C.3

FULLER AND BATTESE "ERROR COMPONENTS" ESTIMATES
1976-1983

Dependent Variable: Net Flow of
Food Stamp Cases

Sample Size =
1600

<u>Variable</u>	<u>Parameter Estimate</u>	<u>t ratio</u>
Intercept	12079.4	0.7
M. Atlantic	-527.2	-0.5
Midwest	-117.1	-0.1
Southwest	-679.5	-0.6
Mt. Plains	128.6	0.1
Western	-932.0	-1.0
Southeast	-400.9	-0.3
POP UNDERS	15490.7	2.5**
POP 5-17	-11128.3	-2.9**
POP 18-44	2245.6	2.2**
POP 45-64	8040.1	1.5
POP 65 PLUS	-7757.0	-2.0**
EPR	13292.8	4.3**
OBRA 81	1055.1	0.3
OBRA 82	-991.9	-0.4
PROJECTS	-3.9	-0.4
MAX FSBENR	34.1	1.1
AFDC OPEN	0.7	8.6**
AFDC CLOSE	-0.7	-9.7**
MAX AFDCBENR	-1.3	-0.3
AVG SOCSECR	-82.8	-1.2
AVG SSIR	-7.8	-1.3
BC PEAK	5078.5	1.1
BC TROUGH	-1965.1	-0.4
PEAK LEAD	-2973.0	-1.0
TROUGH LEAD	-1398.0	-0.5
YPCAPR	-353.8	-1.1
URATE	1224.2	4.1**
IURATE/URATE	3831.8	2.0**
URATE(-1)	-991.4	-3.4**
URATE*PEAK	-428.2	-0.9
URATE*TROUGH	551.3	1.5
1977	934.1	0.4
1978	2592.8	1.0
1979	-2479.5	-0.6
1980	-9466.4	-2.2**
1981	-10910.2	-2.5**
1982	-11501.5	-2.0**
1983	-12434.0	-2.1**

**Significant at the .95 level or better.

rising through time, there is an even greater tendency for the net flow to rise in the face of a fixed percentage increase in unemployment rates.

To capture more fully the variance in the net flows, dummy variables representing each year (1976 was the omitted year) were included. For every year since 1979 the estimates suggest that an effect is operating to significantly reduce the net flow relative to that obtained in 1976. In 1977 and 1978 the estimated effect was positive, although insignificant. This may have reflected the after-effects of rapid program growth which was sustained through the mid-1970's. In 1979 the estimated effect was negative but was insignificant. Since 1979, the effect has been highly significant and growing in magnitude, at least through 1983. Note that this effect is separate from that which can be attributed to 1981 or 1982 OBRA changes, as these are control variables in the equation. Also, the effect is first observed in 1980--before OBRA implementation had begun.

APPENDIX D

ANALYSIS OF THE INTERACTION BETWEEN THE MACROECONOMY AND THE FOOD STAMP PROGRAM (DRI MODEL)

This Appendix describes the data and methods used to develop a quarterly macroeconomic model of the Food Stamp Program. A two equation model was specified--one equation predicts the food stamp caseload and one predicts the average benefit per recipient. The model was used in conjunction with a set of general DRI models of the macroeconomy to produce a counterfactual estimate of the food stamp caseload and costs. The purpose of the counterfactual was to demonstrate the effects of the macroeconomy on the Food Stamp Program. Thus, the caseload and benefits were estimated, assuming that the 1981-82 recession did not take place. The discussion below briefly summarizes the food stamp model and the results of the counterfactual.

Development of a Macroeconomic Model of the Food Stamp Program

The model was estimated using quarterly observations for the 1976-1983 period, inclusive. The character of the Food Stamp Program changed significantly in 1974 when it was expanded to a nationwide program. Thus, data before the expansion were not appropriate for this estimation. Initial model estimations included all quarterly data since the expansion (1974:4), but results were significantly improved when data during the transition period (1974:4-1975:4) were omitted. Thus, there were 32 quarterly time series observations used for each final equation.

Quarterly data were available for each of the nine Census divisions.¹ Originally, separate equations were estimated for each of the divisions. However, since such a small number of observations severely restricted the number variables that could be included in any one equation, a pooled cross-section time series approach was followed.² Two pooling strategies were followed. One combined all of the observations for a single national equation yielding a total pool of 288 observations (9 divisions with 32 quarterly time series each). The other strategy combined the Census divisions into the four main Census regions: Northeast (New England and Mid-Atlantic), South (South Atlantic, East South Central, and West South Central), North Central (East North Central and West North Central), and West (Pacific Northwest and Pacific Southwest). This second strategy facilitated modelling the different regional variation in caseload behavior. As explained in the discussion below, the two different strategies were followed for each of the two equations.

The Food Stamp Reciprocity Equation. The dependent variable in the food stamp reciprocity equation is the number of food stamp recipients divided by the population in each region. The reciprocity rate was used instead of the level of recipients in order to standardize the effect of each of the coefficients across regions. That is, a one percentage point increase in the unemployment rate in a region with a large population produces a larger effect on the number of food stamp recipients than in a region with a smaller population. However, the effect of the unemployment rate on the reciprocity rate is likely to be similar across regions, after controlling for other

1. The nine divisions are: New England, Middle Atlantic, South Atlantic, West South Central, East South Central, East North Central, West North Central, Pacific Northwest, and Pacific Southwest.

2. Multicollinearity prevented reliable estimates of variable coefficients when only 32 observations were available for each equation.

variables which influence the regional caseload. Thus, all explanatory variables are also in rate rather than level form.

Table D.1 defines the variables used in the final food stamp reciprocity rate equations, and Table D.2 presents the equation results. The final model consisted of a single-equation for each of three Census regions--the South, the North Central, and the West, and separate equations for the New England and Mid-Atlantic divisions in the Northeast Census region. A single equation for the Northeast produced unsatisfactory results because the food stamp caseload exhibited very different patterns in these two divisions (and they differed from all other Census divisions). For the final pooled cross-section time series equations in the South, the North Central, and the West statistical test were performed for equality of regression coefficients for the Census divisions contained in each region. Where regression coefficients differed, interaction terms were introduced as shown below.

The unemployment rate was a significant predictor variable in all equations except the Mid-Atlantic. The higher the unemployment rate, the higher the food stamp reciprocity rate. However, the size of this effect often differed by Census division. As indicated in Table D.2, interaction terms had to be introduced to account for these geographic differences in the three pooled Census region equations. In addition, the unemployment rate had an insignificant effect in the Mid-Atlantic equation. Other variables were introduced to further explain the effect of unemployment on the food stamp reciprocity rate. The fraction of the unemployed who have been unemployed for at least 52 consecutive weeks (RD52) was a significant positive predictor variable in the North Central and West equations. As more of the unemployed exhaust their UI benefits, more become eligible for food stamps. Other specifications of the unemployment effect were not satisfactory and,

Table D.1

VARIABLES INCLUDED IN THE FOOD STAMP RECIPIENCY RATE MODEL

<u>Variable</u>	<u>Definition</u>
ELIMPR	Modified dummy variable indicating the elimination of the purchase requirement in the Food Stamp Program ¹
ELIMPR*SATL	ELIMPR interacted with dummy variable indicating South Atlantic region
ELIMPR*ESC	ELIMPR interacted with dummy variable indicating East South Central region
OBRA81	Modified dummy variable indicating the implementation of the 1981 OBRA legislative changes in the Food Stamp Program ¹
RAFDCB	Ratio of the number of AFDC recipients to total population
RAFDCB*SATL	RAFDCB interacted with dummy variable indicating South Atlantic region
RAFDCB*ESC	RAFDCB interacted with dummy variable indicating East South Central region
RAFDCB*ENC	RAFDCB interacted with dummy variable indicating East North Central region
RAFDCB*PNW	RAFDCB interacted with dummy variable indicating Pacific North West region
RD52	Percent of the unemployed who have been unemployed for more than 52 weeks
RHO	Term introduced for correction of autocorrelation among error terms
RHO*ENC	RHO interacted with dummy variable indicating the East North Central region
RHO*ESC	RHO interacted with dummy variable indicating East South Central
RHO*PNW	RHO interacted with dummy variable indicating the Pacific North West region
RHO*PSW	RHO interacted with dummy variable indicating the Pacific South West region
RHO*SATL	RHO interacted with dummy variable indicating South Atlantic region
RHO*WNC	RHO interacted with dummy variable indicating the West North Central region
RHO*WSC	RHO interacted with dummy variable indicating the West South Central region
RPOVERTY	Ratio of the number of people below poverty line to total population
RU	Civilian unemployment rate
RU*ENC	RU interacted with dummy variable indicating East North Central region
RU*ESC	RU interacted with dummy variable indicating East South Central region
RU*PNW	RU interacted with dummy variable indicating Pacific North West region
RU*SATL	RU interacted with dummy variable indicating South Atlantic region
RWEEA	Real wage rate

1. Proportion of states that implemented the legislation by the end of a quarter, weighted by state caseloads.

Table D.2

FOOD STAMP RECIPIENCY RATE MODEL

Dependent Variable: Number of Food Stamp Recipients/Total Population

SOUTH		NORTH CENTRAL		WEST	
<u>Independent Variable</u>	<u>Coefficient</u>	<u>Independent Variable</u>	<u>Coefficient</u>	<u>Independent Variable</u>	<u>Coefficient</u>
Constant	-8.507**	Constant	-2.220**	Constant	-5.247**
RU	.305**	RU	.100*	RU	.114**
RU*SATL	-.145*	RU*ENC	-.019	RU*PNW	.149**
RU*ESC	.155*	RD52	.050**	RD52	.030*
RD52	.045	RWEEA	-.032	RWEEA	-.159**
RWEEA	-.051	RPOVERTY	.495**	RPOVERTY	.504**
RPOVERTY	.382**	RAFDCB	.229	RAFDCB	1.438**
RAFDCB	2.745**	RAFDCB*ENC	.432**	RAFDC*PNW	.138
RAFDCB*SATL	-.237*	ELIMPR	.679**	ELIMPR	1.412**
RAFDCB*ESC	-.629**	OBRA81	-.146	OBRA81	-.538**
ELIMPR	2.392**	RHO*ENC	.223	RHO*PNW	.100
ELIMPR*SATL	-.519**	RHO*WNC	.355*	RHO*PSW	-.170
ELIMPR*ESC	1.462**				
OBRA81	-.083	R ²	.992	R ²	.916
RHO*SATL	.436				
RHO*ESC	.386				
RHO*WSC	.508				
R ²	.980				
NEW ENGLAND		MID ATLANTIC			
<u>Independent Variable</u>	<u>Coefficient</u>	<u>Independent Variable</u>	<u>Coefficient</u>		
Constant	-2.445	Constant	-11.421**		
RAFDCB	1.542**	RAFDCB	1.965**		
RU	.288**	RU	.008		
RPOVERTY	.061	RPOVERTY	.729**		
ELIMPR	.012	ELIMPR	1.363**		
OBRA81	.290	OBRA81	-.369		
DUMSS	.802**	RHO	.124		
RHO	.194				
R ²	.912	R ²	.946		

therefore, excluded from the final model specifications. Alternative specifications included lags, non-linear forms, and the duration of unemployment.

The real wage rate (RWEEA) was included in the three pooled equations, but it was significant only in the North Central and West equations. The higher the real wage rate, the lower the food stamp reciprocity rate. This variable proxies general economic conditions and was expected to be negatively correlated with the food stamp caseload. The poverty rate (RPOVERTY) was included in all equations and it was significant in all but the New England equation. This variable is a proxy for a large part of the population eligible for food stamps. Other specifications of the size of the low income population eligible for food stamps such as the percent with incomes below 130 percent of the poverty line were tested but did not produce satisfactory results.

The reciprocity rate in the AFDC program (RAFDCB) was a significant variable in all of the equations, but its impact differed sharply across the geographic divisions. Most AFDC recipients participate or are at least eligible for food stamps. Thus, this variable had a consistently positive effect on the food stamp reciprocity rate.

Several variables were introduced to explain differences in the Food Stamp Program during the period. The elimination of the purchase requirement had a large positive effect on the caseload, and the variable ELIMPR is positive and significant in all but the New England equation. A dummy variable indicating implementation of the 1981 OBRA legislation was significant only in the West equation. Its sign, however, was consistently negative in all but the New England equation. Initial tests for existence of

autocorrelation of the error terms were positive.¹ Corrections were made for this error and these are included as the RHO variables in each equation as shown in Table D.2.²

The results for the two Northeastern divisions proved to be the most unsatisfactory. Because of the small number of observations, it was necessary to limit the number of explanatory variables. In addition, many of the variables did not perform well in the New England equation. The Food Stamp Program variables were both insignificant as was the poverty rate. The variable (DUMSS) was included to explain an unusual single quarter increase in the caseload caused by snow emergency conditions in Massachusetts.

The forecasting performance of the entire model was quite good, however. The food stamp recipient model's performance was evaluated over the 1976-1983 period and for 1983 alone. The forecast error was measured in two ways. First, a simple average of the quarterly percentage discrepancies was calculated. Second, the square root of the sum of the squared quarterly percentage discrepancies was calculated. This second measure, the "root mean squared percentage error", adds up both positive and negative discrepancies and gives a better measure of the total forecast error. The average percent forecast error was 0.0 over the 1976-1983 period and .5 percent for 1983. The root mean squared percentage error was 2.3 percent for the 1976-1983 period and 1.6 percent for 1983. Thus, both statistics indicate that the reciprocity model performed well.

Table D.3 shows the estimated effect of each variable in the final equations on the level of the food stamp caseload. The 1983 population in

1. The standard Durbin-Watson statistic was used to test for autocorrelation.

2. The RHO variables were calculated according to the Cochran-Orcutt method.

Table D.3

ESTIMATES OF THE EFFECT OF EXPLANATORY VARIABLES ON THE
LEVEL OF THE FOOD STAMP CASELOAD IN 1983¹

Variable	Division									Total Caseload Effect
	NENG	MATL	SATL	ESC	WSC	ENC	WNC	PNW	PSW	
CONSTANT	-306,200	-4,231,000	-3,301,000	-1,270,000	-2,196,000	-913,500	-381,700	-510,700	-1,985,000	-15,095,100
RUQ2	35,970	2,800	62,190	22,430	78,860	33,340	17,380	25,670	41,420	320,060
RD52	----	----	17,490	6,730	11,630	20,590	8,640	2,940	10,930	78,950
RWEEA	----	----	-19,720	-7,589	-13,120	-13,210	-5,540	-15,540	-57,720	-132,439
POVERTY ²	7,576	270,057	148,738	57,342	99,457	205,454	85,896	49,658	183,261	1,107,439
AFDCBR ²	191,520	727,903	976,311	317,533	714,446	274,353	39,807	155,119	522,486	3,919,478
ELIMPR	1,000	503,900	726,820	139,090	618,000	281,900	118,300	138,000	512,570	3,039,580
OBRA81	36,240	-137,100	-32,230	-12,380	-21,410	-60,708	-25,480	-52,600	-195,400	-501,068
DUMSS ²	99,961	----	----	----	----	----	----	----	----	----
RHO	71,988	45,786	169,719	57,927	155,654	92,558	61,585	9,849	-61,753	377,562
Population Share	5.3%	15.8%	16.6%	6.4%	11.1%	17.7%	7.4%	4.2%	15.5%	100%

1. The explanatory variables in the reciprocity rate equations (Table D.2) were converted to level form using the 1983 population in that region.

2. Calculated from equation results and 1983 population; others were supplied by DRI, Inc.

each Census division was used to translate the reciprocity rate equation into level form. The last column shows the national caseload effect.

Food Stamp Benefit Equation. The dependent variable in the benefit equation is the percentage change in the real average food stamp benefit per recipient. The advantage of this specification of the dependent variable is that it captures the fact that a general percentage increase in the food stamp allotment translates into different percentage increases in benefits for food stamp recipients, depending on their benefit level. That is, when the maximum food stamp allotment is adjusted (by applying the change in the Thrifty Food Plan to the previous maximum allotment), this generates a fixed dollar increase for each household size. Households with smaller benefits, therefore, receive larger percentage increases than those at the maximum. The dependent variable was estimated in real terms in order to highlight the effect of explanatory variables other than the increase in food prices.¹

Table D.4 defines the variables used in the food stamp benefits equation and Table D.5 presents the results. Since adjustments in food stamp benefits are made uniformly across the nation a single equation was estimated, pooling the time series data for all nine Census divisions. Tests on the equality of the coefficients of the equation across the divisions showed that none were statistically different.

As shown in Table D.5 the percentage change in the real maximum allotment for a family of four (PRMAXALLOT4), dominates the equation with a coefficient of about 1.7. This result indicates that a ten percent increase in the real maximum allotment leads to a 17 percent increase in the average real benefit per person. As discussed earlier, the average percentage increase in benefits

1. The food stamp benefit and the maximum allotment variables were deflated by the CPI for food at home, while other income variables were deflated by the CPI for all items.

Table D.4

VARIABLES INCLUDED IN THE FOOD STAMP BENEFIT EQUATION

<u>Variable</u>	<u>Definition</u>
ELIMPR	Modified dummy variable indicating elimination of purchase requirement in the Food Stamp Program ¹
OBRA81	Modified dummy variable for 1981 OBRA legislation ¹
OBRA82	Modified dummy variable for 1982 Amendments ¹
PRAVGAFDC	Percent change in average AFDC benefit per recipient deflated by CPI for all items
PRMAXALLOT4	Percent change in maximum food stamp allotment for a family of 4, deflated by CPI for food at home
PRMNDEF	Percent change in mean income deficit below the poverty line, deflated by CPI for all items
PRWSD%N	Percent change in wage and salary disbursements per capita, deflated by CPI for all items
RHO*ENC	Correction for autocorrelation in error terms, interacted with dummy variable indicating East North Central region
RHO*ESC	Correction for autocorrelation in error terms, interacted with dummy variable indicating East South Central region
RHO*MATL	Correction for autocorrelation in error terms, interacted with dummy variable indicating Mid Atlantic region
RHO*NENG	Correction for autocorrelation in error terms, interacted with dummy variable indicating New England region
RHO*PNW	Correction for autocorrelation in error terms, interacted with dummy variable indicating Pacific North West region
RHO*PSW	Correction for autocorrelation in error terms, interacted with dummy variable indicating Pacific South West region
RHO*SATL	Correction for autocorrelation in error terms, interacted with dummy variable indicating South Atlantic region
RHO*WNC	Correction for autocorrelation in error terms, interacted with dummy variable indicating West North Central region

1. Proportion of states that implemented the legislation by the end of a quarter, weighted by states' caseloads.

Table D.5

AVERAGE FOOD STAMP BENEFIT PER RECIPIENT
(1967 Dollars)
Dependent Variable: Percent Change in Average Benefit Per Recipient

<u>Interdependent Variable</u>	<u>Coefficient</u>
PRMAXALLOT4	1.691**
PRAVGAFDC	-.156**
PRWSD%N	-.409**
PRMDEF	.222
ELIMPR	.365
OBRA81	-2.532**
OBRA82	2.021**
RHO*NENG	-.345**
RHO*MATL	-.457**
RHO*SATL	-.313*
RHO*ESC	-.181
RHO*WSC	-.125
RHO*ENC	-.173
RHO*WNC	- .387**
RHO*PNW	- .190
RHO*PSW	- .202
R ²	.820

is significantly larger than the percentage change in the maximum allotment since most recipients do not receive the maximum allotment. The percentage change in the real average AFDC benefit (PRAVGAFDC) was a significant explanatory variable and, as expected, is negatively related to the food stamp benefit. The food stamp benefit, of course, is adjusted to offset changes in other income sources. The per capita real wage and salary disbursements variable (PRWSDZN) was also significant and negatively related to the food stamp benefit. This macroeconomic variable is intended to indicate that rising real incomes lead to falling average food stamp benefits. The real poverty deficit (PRMNDEF) is the difference between the average income of families below the poverty line and the actual poverty line. This variable was very significant (t=6.3) and positively related to the percent change in

the average food stamp benefit. As the deficit rises so will the food stamp benefit to offset part of the income loss.

The policy variable to indicate the elimination of the purchase requirement (ELIMPR) was not significant. The primary effect of this legislation was an increase in the caseload. Most evidence indicates that its effect on the average benefit was positive (that is, the new participants tended to have lower average incomes than the existing caseload).¹ These results were consistent with that finding but the effect was not significant.

In contrast, both the OBRA81 and OBRA82 policy variables were significant. As expected, OBRA81 had a negative effect on real benefits because of the COLA delay. The fact that OBRA82 had a positive effect is somewhat perplexing. The October 1982 catch-up COLA would have been captured in the maximum allotment variable. However, the 1981 OBRA legislation

reinstated the net income test for non-elderly, non-disabled households at 100 percent of poverty. It is possible that relatively high-income, low-benefit households left the program because of this provision, increasing the average per capita benefit of those who remained on the caseload.

The RHO variables indicate the first-order autocorrelation corrections interacted with dummy variables for each Census diversion. The overall R-square statistic of the equation was .8197--a good fit for a variable estimated in first-difference form. Various other variables were tried but eliminated from the final model. An average SSI benefit variable proved unsatisfactory, as did an average per capita income variable, and the relative price of food.

The forecasting performance of the food stamp benefits model was also quite good. The mean percent error for the entire 1976-1983 period was less than 1 percent, and the root mean squared percent error was 2.7 percent. The model's performance for just the 1983 forecast was essentially the same.

The Impact of a "No-Recession" Scenario on The Food Stamp Program

The food stamp caseload and benefits equations were used to estimate the Food Stamp Program under an assumption that the 1981-82 recession did not take place. The counterfactual results demonstrate the impact that the economy can have on the program. Since it is countercyclical these effects are very strong.

The counterfactual economic scenario assumed that the economy was growing continuously throughout the period. Table D.6 shows the differences between three key macroeconomic variables in the counterfactual scenario compared to the historic values. In the no-recession scenario, real gross national product was assumed to grow by 8.2 percent over the forecast period (1981:1 through 1983:4), whereas actual growth was only 3.9 percent.

Table D.6
COUNTERFACTUAL MACROECONOMIC ASSUMPTIONS

Forecast Quarter	Real GNP (Billions)			Civilian Unemployment Rate			Inflation		
	Actual	No Recession	Difference	Actual	No Recession	Difference	Actual	No Recession	Difference
1981:1	1,514.5	1,517.2	3.7	7.43	7.33	-.11	11.38	10.80	-.58
1981:2	1,511.7	1,532.9	21.2	7.33	6.98	-.35	8.73	9.02	.29
1981:3	1,522.1	1,560.6	38.5	7.43	6.77	-.66	11.47	12.89	1.42
1981:4	1,501.3	1,558.7	57.4	8.23	7.17	-1.06	6.78	8.33	1.55
1982:1	1,483.5	1,560.2	76.7	8.83	7.22	-1.61	3.76	4.40	.64
1982:2	1,480.5	1,587.7	107.2	9.43	7.25	-2.18	5.47	7.05	1.58
1982:3	1,477.1	1,600.2	123.1	10.00	7.34	-2.66	7.20	9.63	2.43
1982:4	1,478.8	1,599.4	120.6	10.60	7.66	-2.94	1.56	3.79	2.23
1983:1	1,491.0	1,606.5	115.5	10.37	7.38	-2.98	.32	1.43	1.11
1983:2	1,524.8	1,629.0	105.0	10.10	7.34	-2.76	4.34	5.86	1.53
1983:3	1,550.2	1,638.9	88.7	9.40	7.08	-2.32	4.15	6.19	2.04
1984:4	1,572.7	1,640.7	68.0	8.47	6.81	-1.66	4.43	6.05	1.62

The peak difference between the counterfactual and the historic simulations occurred in 1982:3 when real GNP was 8 percent higher in the counterfactual. The unemployment rate was fairly stable in the counterfactual at approximately 7 percent throughout the forecast period, while the historic unemployment rate rose to 10.6 percent in 1982. The inflation rate was also significantly different in the counterfactual. It peaked at 9.6 percent in 1982:3, compared to a 7.2 percent historic rate.

These values were the result of imposing a significant increase in the money supply in the DRI model of the U.S. Economy so that the economy averted two consecutive quarters of decline in real GNP. This scenario was chosen to demonstrate the effect of the macroeconomy on the Food Stamp Program, and not to construct a realistic scenario assuming that different economic policies had been followed in the 1981-82 period. The no-recession scenario represented an extremely optimistic picture of what might have happened if a looser monetary policy had been followed. Thus, the simulation results present a range of outcomes for the Food Stamp Program, with the historic results indicating the effects of a severe recession and the counterfactual results showing the effects of a very strong economy.

The DRI Demographic-Economic (DECO) model was used to simulate the distribution of income, given the final macroeconomic counterfactual. The DECO model simulates both demographic shifts in the U.S. population and changes in the distribution of income. In turn, the DRI Regional Information Service (RIS) model was run to simulate the outcomes in the nine Census divisions. The RIS model simulates the unemployment rate and the real wage rate for each of the nine divisions in the U.S. Subsequently, a set of bridge equations was used to simulate various variables not included in the DRI models, but included in the food stamp equations. Bridge equations are

regression equations that are not fully integrated with the DRI models, but provide forecasts of additional variables required by the food stamp model. The bridge equations forecast the AFDC reciprocity rate, average AFDC benefits, poverty rates at the regional level, the fraction of the unemployed whose unemployment duration exceeded 52 weeks, and the CPI for food at home.

Finally, the food stamp caseload and benefits equations presented earlier were used to forecast the program in the counterfactual simulation. Table D.7 shows the effect of the counterfactual scenario on the food stamp caseload in the first quarter of 1983. The results for each region and the total are shown. In addition, each column shows the impact of the important explanatory variables on the caseload. Table D.8 shows the effect of the counterfactual on the average real per capita food stamp benefit for the same quarter. The change in each explanatory variable and the net effect on the benefit are shown. Figures D.1 and D.2 show the food stamp caseload and benefits for the actual and the no-recession scenario, respectively.

A further examination of the results of the DRI counterfactual simulation in the context of the other analyses in this study implies that the results are overstated for two reasons. First, the counterfactual assumptions, which were selected after much discussion, were overly optimistic and probably contrasted the recession with an economy that could not have existed in the 1981-1983 period. Second, because of constraints on the number of variables that could be used in the DRI model, the unemployment variable overstated the response of the Food Stamp Program to a recession like the one of 1982-83. A more realistic estimate is provided in Chapter V of this report.

Table D.7

CAUSES OF THE CHANGE IN THE NUMBER OF FOOD STAMP
RECIPIENTS (THOUSANDS), BY DIVISION, 1983:1

Division	Poverty Level (1,000)	Unemploy. Rate (%)	Longterm Unempl. (1,000)	AFDC (1,000)	Real Wage (1,000)	Total Recipient Effect
New England						
Change in exp. variable	-183	-2.5	NA	-13	NA	
Effect on reciency	-12	-89	NA	-20	NA	-121
Mid-Atlantic						
Change in exp. variable	-542	-2.2	NA	-40	NA	
Effect on reciency	-396	-7	NA	-79	NA	-482
South Atlantic						
Change in exp. variable	-69	-2.7	-107	-114	+0.122	
Effect on reciency	-27	-322	-122	-312	-7	-790
East South Central						
Change in exp. variable	-27	-3.6	-46	-48	+0.143	
Effect on reciency	-10	-165	-38	-132	-3	-349
West South Central						
Change in exp. variable	-46	-1.7	-41	-77	+0.162	
Effect on reciency	-18	-135	-45	-211	-6	-415
East North Central						
Change in exp. variable	-964	-3.8	-213	-204	+0.140	
Effect on reciency	-469	-172	-182	-47	-5	-875
West North Central						
Change in exp. variable	-404	-2.2	-36	-53	+0.029	
Effect on reciency	-196	-41	-46	-12	-5	-296
Pacific Northwest						
Change in exp. variable	-203	-2.5	-25	-14	+0.168	
Effect on reciency	-103	-27	-15	-20	-8	-173
Pacific Southwest						
Change in exp. variable	-752	-2.6	-80	-105	+0.133	
Effect on reciency	-381	-101	-58	-153	-23	-716
Total USA						
Change in exp. variable	-3,190		-709	-669		
Effect on reciency	-1,612	-1,059	-506	-986	-57	-4,217

*Excluding effect of autocorrelated error term.

Table D.8

CAUSES OF THE CHANGE IN AVERAGE FOOD STAMP BENEFIT PER RECIPIENT IN
THE FIRST QUARTER OF 1983 ASSUMING NO RECESSION
(1967 \$)

	<u>Change in Explanatory Variable</u>				<u>Total Effect on Average Food Stamp Benefit Per Recipient</u>
	<u>Maximum Allotment</u>	<u>AFDC Benefit</u>	<u>Wage and Salary Disbursements</u>	<u>Poverty Deficit</u>	
New England	-.36	-.58	44.75	-107.60	-.47
Middle Atlantic	-.36	-2.10	1.32	-107.60	-.29
South Atlantic	-.36	-.66	34.83	-107.60	-.44
East North Central	-.36	-1.30	-18.78	-107.60	-.33
East South Central	-.36	-.64	38.65	-107.60	-.48
West North Central	-.36	-.67	13.43	-107.60	-.41
West South Central	-.36	.58	40.07	-107.60	-.65
Pacific Northwest	-.36	-1.12	50.70	-107.60	-.48
Pacific Southwest	-.36	-.02	33.71	-107.60	-.46
U.S. Average	-.36	-.78	20.31	-107.60	-.43

Figure D.1

PRIMARY MODEL
FOODSTAMP RECIPIENTS IN U.S.
ACTUAL VS. NO RECESSION SCENARIO

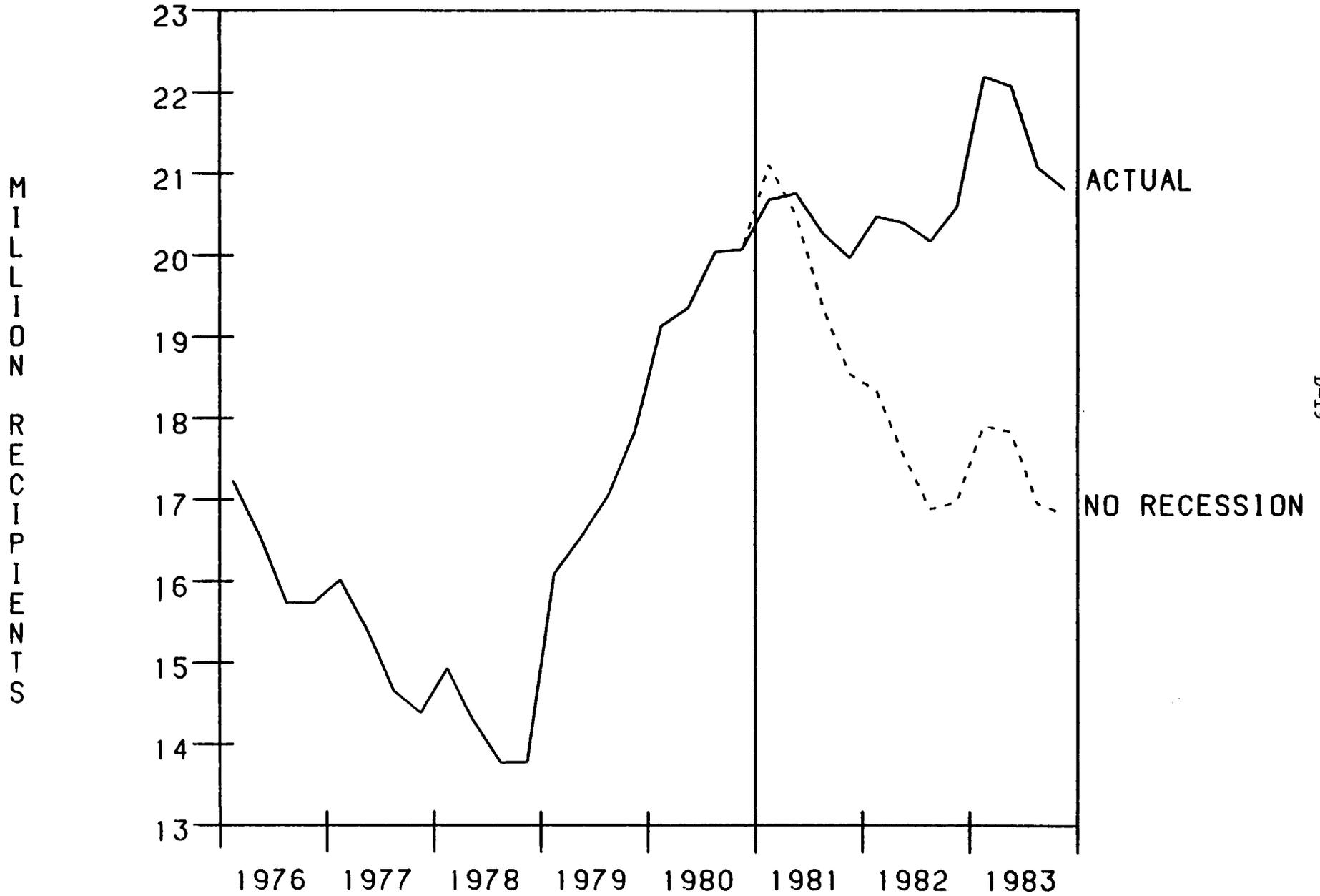
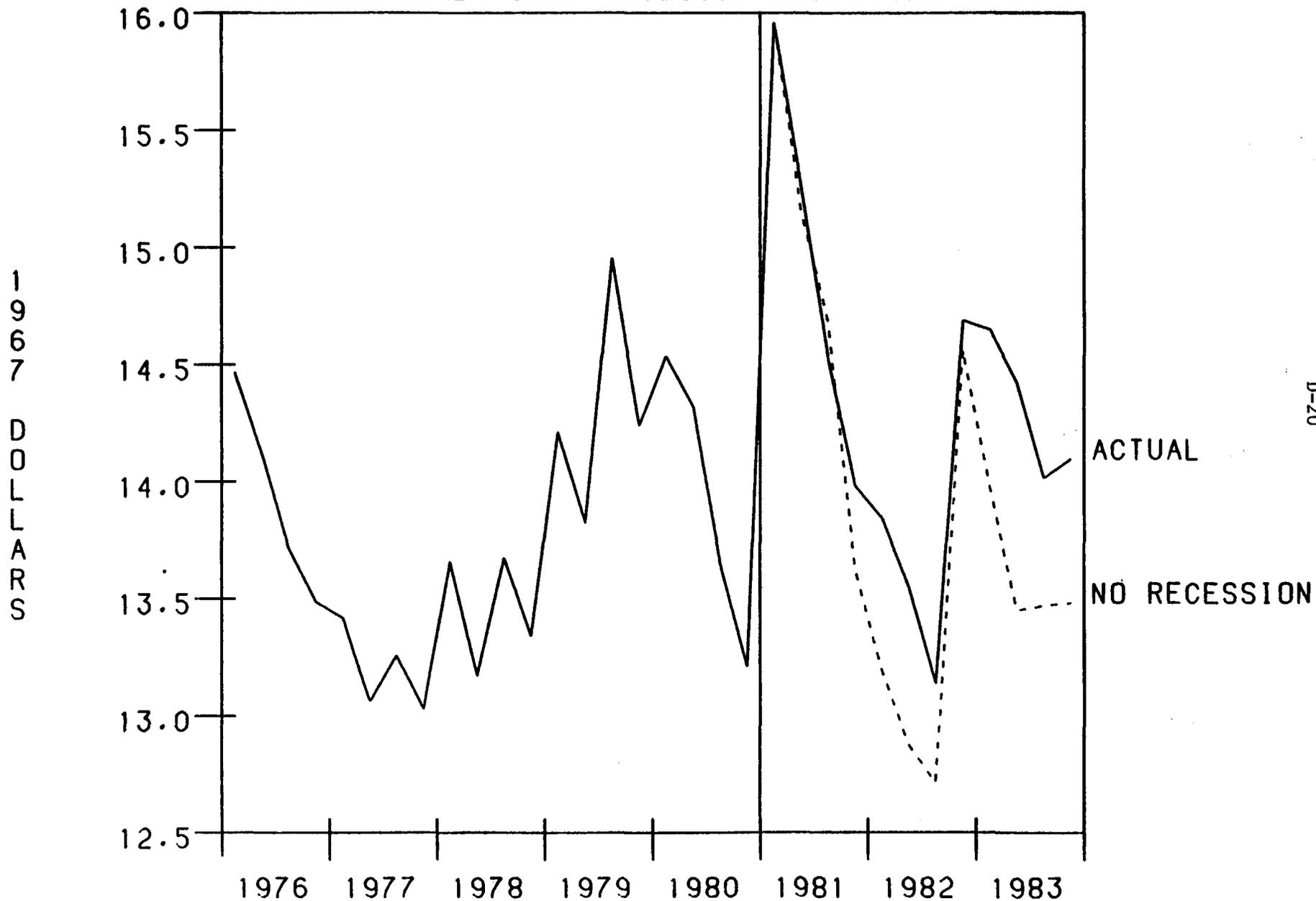


Figure D.2
PRIMARY MODEL
AVERAGE FOODSTAMP BENEFIT IN U.S. (1967\$)
ACTUAL VS. NO RECESSION SCENARIO



APPENDIX E

ANALYSIS OF THE LONGITUDINAL FOOD STAMP CASE RECORD DATA

Overview

The evaluation of the effects of the 1981 and 1982 legislative changes in the Food Stamp Program includes analysis of a nationally representative sample of cases tracked over a three year period. In order to allow inferences about the impact of the major changes, the sample was drawn from cases active at any time between October 1, 1980 (one year before the implementation of the first changes) and December 31, 1983. The survey was conducted by Market Facts, Inc. under subcontract to The Urban Institute.

Data from actual program records were abstracted to develop a longitudinal file describing all Food Stamp Program status changes, benefit levels and other actions for each sampled case. In addition to case record data, information was also collected on (1) local program variables including when and how various changes were implemented in each office in the sample; and (2) the local unemployment rate in sampled communities. This Appendix describes the methods used for sampling, collecting, and editing these data and the types of preliminary analysis done to date. The sample design is presented, followed by a summary of the case record data and abstraction procedures. Next, the local program information is described. Finally, a brief discussion of the editing and preliminary descriptive analysis follows.

Sampling Design

The target population for this analysis is all food stamp cases active at any time between October 1, 1980 and December 31, 1983, in the forty-eight coterminous states and the District of Columbia. The two-stage stratified

sampling framework was designed to generate a sample representative of the target population such that inferences about the population could be drawn from sample information. In the first stage local food stamp offices were selected and the second stage consisted of drawing cases in each sampled office.

The sample design consisted of selecting sixty local food stamp offices that would together provide a representative sample of all food stamp cases. The original design however, was modified as a result of a desire to coordinate this survey with another food stamp study of expedited services conducted by SRA Technologies, which also included abstracting data from case records in sixty sites. In order to minimize the total number of local offices participating in the two studies, the sample design was revised to allow for 38 overlapping sites (i.e., 38 sites were to be included in both studies, and 22 would be in The Urban Institute's evaluation only).

In the final sample design 60 sites were chosen from a total of 3577 local offices; the probability of site selection varied with caseload size and geographic location. Table E.1 shows the sampled offices by region and caseload size. Next, a sampling rule was developed that would result in any case having equal probability of selection over the entire sample of qualified cases--cases active between October 1, 1980 and December 31, 1983. Within each office the qualified caseload was estimated and the sampling rule applied to determine the number of cases to be abstracted from that office. The required number was randomly selected from the total qualified group and the information abstracted.¹

1. A final modification became necessary because 18 of the 60 offices had purged cases that had been closed with no action for three years. The sample frames for these 18 offices reflected the earliest date for which all closed cases could be reviewed.

Table E.1
 SAMPLED OFFICES BY REGION AND CASELOAD SIZE

Office Size	Region			
	East	Midwest	South	West
Largest (5011-62,932 cases)	7	7	5	3
Larger (2714-5004 cases)	3	2	3	2
Large (1903-2710 cases)	1	1	5	2
Medium (661-1896 cases)	2	3	8	2
Small (< 660 cases)		2*	1	1

*Because of the small percentage of the total caseload represented by the East-Small cell (0.3%) this cell was combined with Midwest-Small.

Table E.2 lists the final number of cases abstracted in each office. The sites that overlap with the SRA study are noted as are those which had time frames other than October 1, 1980 - December 31, 1983.

Data Abstraction

Data abstraction consisted of recording information on each selected case at baseline and after any changes that occurred between baseline and December 31, 1983. Baseline was defined as the application or recertification date closest in time to October 1, 1980. The following types of items at baseline and after any changes were recorded:

- o Case status (openings and closings)
- o Individual and household description (including age)
- o Level and certification period of benefits
- o Allowable expenses and deductions
- o Employment status
- o Earnings, assets and other income
- o Participation in other programs

This information was recorded on three types of abstraction forms:

- o Initial Form (for baseline information)
- o Monthly Report Form (for recording the months in which a monthly report was filed)
- o Update Form (for changes in status, benefits or conditions; new information; regular recertifications; monthly report with changes)

Market Facts, Inc., processed the forms for verification, editing, and data processing. The data were delivered in tape form to The Urban Institute for further processing and analysis.

Table E.2

FINAL SAMPLE OF CASES ABSTRACTED BY LOCAL OFFICE

Office Number	Location	Number of Cases Sampled
01	*Perry County, Alabama	76
02	*DeKalb County, Alabama	101
03	*Mississippi County, Arkansas ⁴	49
04	*Solano County, California	205
05	Los Angeles County (ElMonte), CA	103
06	Alameda County (Hayward), CA	169
07	*Arapahoe County, Colorado	226
08	Fremont County, Colorado	84
09	*San Miquel County, Colorado	40
10	Middletown, Connecticut	122
11	*Pasco County, Florida ³	102
12	Dade County (SW 1st. St., Miami) FL	82
13	Dade County (W. Flagler, Miami), FL	62
14	Hillsborough County, Florida	88
15	Pottawatomie County, Oklahoma	82
16	*Craig County, Oklahoma	137
17	Roanoke, Virginia	102
18	*Ford County, Illinois ¹	99
19	Cook County (W. Oak St.), Illinois	48
20	Cook County (N. Milwaukee Ave.), Ill	197
21	*Polk County, Iowa	201
22	*Clark County, Kentucky ³	73
23	*Lawrence County, Kentucky	72
24	*Franklin Parish, Louisiana	52
25	Fall River, Massachusetts	89
26	*LaPeer County, Michigan ¹	119
27	Wayne County (Harper St., Detroit) MI	86
28	Wayne County (Inkster), MI	60
29	Saginaw County, MI	177
30	*St. Louis, Missouri ¹	288
31	Missoula County, Montana ³	113
32	Las Vegas, Nevada ³	284
33	*Bergen County, New Jersey	178
34	*Middlesex County, New Jersey ²	58
35	*Monmouth County, New Jersey	127
36	Oneida County, New York	93
37	*New York City (E. 34th St.) NY	61
38	*New York City (Hinsdale-Brklyn), NY	87
39	Monroe County, New York	38

Table E.2 (continued)

Office Number	Location	Number of Cases Sampled
40	New York City (Broadway), NY	146
41	*Halifax County, North Carolina	158
42	*Cherokee County, North Carolina	55
43	*Martin County, North Carolina	104
44	*LaMoure County, North Dakota ¹	27
45	*Allen County, Ohio	115
46	Mecklenburg County, North Carolina	171
47	Lucas County, Ohio	248
48	*Susquehanna County, Pennsylvania	72
49	Philadelphia (Federal Dist.), PA	95
50	*Saluda County, South Carolina	89
51	Williamsburg County, South Carolina	93
52	*Uankton, South Dakota ¹	107
53	*Dallas (Ross Ave.), Texas ⁵	202
54	*Mission, Texas ⁵	64
55	*Greenville, Texas ⁵	69
56	*Spokane (S. Arthur), Washington	94
57	*Spokane (N. Washington), Washington	85
58	*McDowell County, West Virginia ¹	43
59	*Fond Dulac County, Wisconsin	137
60	*Racine County, Wisconsin ⁶	30
	Total	6,671

*These 38 sites were also included in the SRA study of expedited services in the Food Stamp Program.

1. The sample frame for these offices was 1/1/81-12/31/83
2. The sample frame for this office was 5/1/81-12/31/83
3. The sample frame for these offices was 7/1/81-12/31/83
4. The sample frame for this office was 9/1/81-12/31/83
5. The sample frame for these offices was 10/1/81-12/31/83
6. The sample frame for this office was 10/1/82-12/31/84

Local Program Information

In order to examine fully the effects of the federal legislative changes in the Food Stamp Program, information was collected from each of the 60 sample offices about (1) when the changes were implemented (i.e., in which months); and (2) how the changes were implemented (e.g., all cases affected at once, or cases reviewed at next recertification).

The following legislative changes were addressed:

- o Gross income limit of 130 percent of the poverty line for nonaged and nondisabled households;
- o Reduction of the earnings deduction from 20 percent to 18 percent;
- o Proration of initial benefits from the day of application;
- o New definition of a food stamp household regarding adult children and siblings;
- o Net income limit of 100 percent of the poverty level for nonaged and nondisabled households;
- o Monthly reporting;
- o Expansion of work requirements (e.g., job search, workfare);
- o Restriction on the use of standard utility allowances.

Since many food stamp recipients also participate in other public programs, the information from local office administrators also addressed major changes in AFDC (e.g., monthly reporting, WIN, Workfare), and General Assistance that might have occurred during the study period. These program implementation variables were coded and added to the case records file for inclusion in the analysis of the effect of legislative changes.

Preliminary Analysis

The case records file prepared by Market Facts underwent a series of elaborate consistency checks and data verification procedures prior to analysis. As is discussed below, this was necessitated by the fact that over

the course of the abstraction period a particular case could undergo many changes--events such as household size changes, changes in earnings or AFDC income, and changes in shelter costs or work expenses--in addition to scheduled recertifications or case openings, closings, and reapplications. The high level of activity and the importance of ordering events chronologically imposed the need for a highly structured verification procedure.

The file consisted of 6671 cases, of these, 551 cases had various inconsistencies such that they could not be processed. The single most common type of problem encountered was that the dates associated with key events were inconsistent (or missing) and simple rules of logic did not result in reasonable imputations. It is expected that many of these can be corrected using manual correction procedures as editing continues on the data file. The sample on which preliminary analysis was based totaled 6110 cases.

A few general statements about the characteristics of the case records are suggestive of the complications involved in abstracting these data. First, 90,390 valid monthly observations were generated out of 238,290 potential monthly observations (39-month period of analysis times 6110 cases = 238,290). Hence, on average, a case was active 38 percent of the time, or 15 months.

There was considerable activity across the records in the sample. As mentioned previously, update forms were recorded for any changes in status, benefits, household characteristics, etc. Over 28,000 update sets were recorded and the distribution of the number of updates across the total number of households is shown in Table E.3. Closings, reapplications, and recertifications are types of updates of particular interest. Distributions are shown in Table E.4 through Table E.6.

Table E.3
DISTRIBUTION OF REPORTED UPDATE SETS PER CASE

Number of Update Sets	Number of Cases
0	970
1	1092
2-5	2659
6-10	1275
11-20	551
21-30	56
31+	7
	<u>6610</u>

Table E.4
DISTRIBUTION OF REPORTED CLOSINGS PER CASE

Number of Closings	Number of Cases
0	2035
1	3507
2	814
3-5	249
6-10	5
	<u>6610</u>

Table E.5
DISTRIBUTION OF REPORTED REAPPLICATIONS PER CASE

Number of Reapplications	Number of Cases
0	4886
1	1276
2	326
3-6	122
	<u>6610</u>

Table E.6
DISTRIBUTION OF REPORTED RECERTIFICATIONS PER CASE

Number of Recertifications	Number of Cases
0	2085
1	1308
2	925
3-5	1583
6-10	654
11-20	52
21+	3
	<u>6610</u>

Descriptive analysis of the data was of interest in its own right and also served as a means of verifying the case records information. Mean values by month were calculated for the benefit amount (AVG-BEN), the month-to-month change in the benefit (AVG-CH), reported gross income (AVG-GRSY), the proportion of cases with earnings reported (EARN-P), the proportion with AFDC income reported (AFDC-P), and the proportion with a member 65 years of age or older present (AGED-P).

Two additional variables are described, the entry rate (ENTRY-RT) and the exit rate (EXIT-RT). The former is defined as the proportion of all active cases that are newly opened this month.¹ Analogously, the exit rate is defined as the proportion of all active cases for which this is the last month in a spell. Note that the exit rate is not measured properly in month 39 because it cannot be observed whether that is a last month for most cases. Separate analyses were conducted for the following subgroups:

- o All active cases;
- o Newly opened cases;
- o Newly closed cases;
- o Cases with earnings;
- o Cases with AFDC income;
- o Cases with an aged member.

In addition, special tabulations were generated for the months around implementation of prorating and the change to a gross income limit of 130 percent of poverty.

1. There is an apparent tendency for the entry rate to be somewhat high in the first few months of the abstraction period. It is not clear whether this is a real effect or due to sampling features. Because the abstraction period was delayed in a few sites, sample sizes in the early months are somewhat reduced.

Average values for selected variables are shown in Tables E.7 through E.12. Each table corresponds to a particular subgroup, as indicated above. The time frame is the 39-month abstraction period.

<u>Month</u>	<u>Date</u>
1	October, 1980
4	January, 1981
16	January, 1982
28	January, 1983
39	December, 1983

The variables for which means are presented include:

(1) Monthly Benefit	AVG-BEN
(2) Month-to-Month Change in Benefit	AVG-CH
(3) Gross Household Income	AVG-GRSY
(4) Proportion of Cases Leaving this Month	Exit-RT
(5) Proportion of Newly Opened Cases this Month	Entry-RT
(6) Proportion of Cases Reporting Earnings	Earn-P
(7) Proportion of Cases Reporting AFDC	AFDC-P
(8) Proportion of Cases with a Member 65 or Older	AGED-P

Table E.7

MEAN VALUES FOR ALL ACTIVE CASES BY MONTH

MONTH	_TYPE_	_FREQ_	AVG_REN	AVG_CH	AVG_GRSY	EXIT_RT	ENTRY_RT	EARN_P	AGEO_P	AFDC_P
1	0	1476	94.219	.	328.896	0.0481030	0.092818	0.193767	0.205285	0.331978
2	0	1561	93.828	8.8255	328.553	0.0499680	0.099936	0.197950	0.201794	0.335682
3	0	1647	94.500	9.5185	329.194	0.0497875	0.100789	0.202793	0.199757	0.333940
4	0	1796	91.048	17.6825	326.775	0.0534521	0.128619	0.197105	0.197661	0.330178
5	0	1854	94.861	10.9493	332.500	0.0507012	0.083603	0.208738	0.196872	0.336570
6	0	1916	96.529	9.6047	333.702	0.0605428	0.081942	0.204593	0.198852	0.341336
7	0	1949	98.329	9.2808	335.102	0.0590046	0.076963	0.201642	0.194972	0.350436
8	0	1997	99.210	9.3898	331.978	0.0450676	0.082123	0.203305	0.202303	0.359539
9	0	2079	100.748	9.6768	328.852	0.0707071	0.081289	0.208754	0.195767	0.350168
10	0	2150	100.382	10.8887	331.435	0.0655814	0.101395	0.212558	0.196279	0.343256
11	0	2192	100.950	8.9868	334.498	0.0529197	0.083485	0.213047	0.194799	0.341697
12	0	2267	100.035	8.2594	336.028	0.0688134	0.084252	0.217909	0.195412	0.340097
13	0	2303	98.682	7.2796	339.205	0.0712115	0.082935	0.219713	0.194095	0.341294
14	0	2317	99.823	8.3575	341.355	0.0664653	0.077255	0.220112	0.190332	0.336642
15	0	2349	99.267	7.7998	344.348	0.0668370	0.080460	0.223499	0.193274	0.339293
16	0	2361	100.022	8.3182	344.334	0.0626853	0.074121	0.222363	0.190174	0.330368
17	0	2386	101.797	9.0580	342.888	0.0725063	0.069992	0.219614	0.189019	0.328583
18	0	2364	101.729	6.7545	343.896	0.0642978	0.064721	0.211929	0.191624	0.325296
19	0	2353	101.020	5.9834	346.415	0.0726732	0.060348	0.209945	0.192945	0.325967
20	0	2310	100.587	4.9211	350.095	0.0701299	0.056277	0.207359	0.196970	0.331602
21	0	2322	100.133	4.0822	352.344	0.0626160	0.072112	0.207325	0.195300	0.334400

Table E.8

MEAN VALUES FOR ALL NEWLY OPENED CASES BY MONTH								
MONTH	_TYPE_	_FREQ_	AVG_BEN	AVG_GRSY	EXIT_RT	EARN_P	AGED_P	AFDC_P
1	0	138	83.095	266.290	0.108696	0.224638	0.079710	0.159420
2	0	156	86.186	293.617	0.051282	0.230769	0.115385	0.269231
3	0	167	95.916	288.811	0.083832	0.275449	0.113772	0.269461
4	0	233	93.922	296.240	0.064378	0.214592	0.133047	0.240343
5	0	155	108.987	300.935	0.103226	0.290323	0.077419	0.225806
6	0	157	102.554	280.841	0.108280	0.203822	0.114650	0.235669
7	0	153	111.573	285.862	0.143791	0.267974	0.065359	0.267974
8	0	165	106.085	302.376	0.054545	0.254545	0.169697	0.266667
9	0	171	114.320	258.071	0.105263	0.304094	0.064327	0.157895
10	0	218	113.193	285.318	0.155963	0.261468	0.110092	0.215596
11	0	183	117.814	294.694	0.092896	0.311475	0.071038	0.218579
12	0	192	111.984	291.637	0.125000	0.317708	0.093750	0.223958
13	0	194	89.592	293.840	0.082474	0.298969	0.077320	0.201031
14	0	179	99.425	296.237	0.106145	0.290503	0.055866	0.162011
15	0	189	84.286	315.222	0.095238	0.370370	0.095238	0.206349
16	0	175	91.097	293.649	0.051429	0.348571	0.040000	0.160000
17	0	167	102.784	295.407	0.131737	0.269461	0.077844	0.161677
18	0	153	82.235	266.119	0.065359	0.222222	0.091503	0.137255
19	0	143	90.711	281.790	0.090909	0.251748	0.069930	0.209790
20	0	131	83.092	296.725	0.099237	0.236641	0.076336	0.213740
21	0	182	78.566	307.352	0.109890	0.280220	0.065934	0.148352
22	0	210	90.214	258.981	0.100000	0.328571	0.071429	0.195238
23	0	203	85.282	272.576	0.073892	0.310345	0.044335	0.231527
24	0	194	103.860	294.139	0.087629	0.268041	0.067010	0.226804
25	0	210	99.225	293.471	0.076190	0.309524	0.047619	0.176190
26	0	198	93.308	302.182	0.045455	0.282828	0.085859	0.186869
27	0	175	100.389	369.509	0.034286	0.325714	0.062857	0.108571
28	0	209	95.196	294.284	0.047847	0.368421	0.043062	0.114833
29	0	171	85.339	320.450	0.029240	0.362573	0.052632	0.134503
30	0	171	107.518	278.159	0.040936	0.321637	0.064327	0.181287
31	0	134	94.626	263.008	0.059701	0.238806	0.104478	0.223881
32	0	119	101.798	300.966	0.092437	0.319328	0.050420	0.235294
33	0	156	93.904	283.282	0.076923	0.269231	0.057692	0.185897
34	0	175	88.468	282.517	0.085714	0.274286	0.085714	0.171429
35	0	181	83.667	351.337	0.027624	0.370166	0.077348	0.220994
36	0	158	91.342	364.500	0.025316	0.341772	0.037975	0.189873
37	0	161	94.056	322.208	0.080745	0.229814	0.124224	0.223602
38	0	173	91.671	270.936	0.063584	0.283237	0.075145	0.202312
39	0	130	99.485	320.815	0.007692	0.376923	0.061538	0.130769

Sample Size = 6729

Table E.9

MEAN VALUE OF CHANGE IN BENEFITS FOR ALL NEWLY CLOSED CASES BY MONTH

MONTH	_TYPE_	_FREQ_	AVG_CH
2	0	71	-100.55
3	0	80	-92.38
4	0	82	-90.71
5	0	96	-82.66
6	0	94	-95.49
7	0	117	-97.72
8	0	116	-105.33
9	0	90	-105.37
10	0	147	-118.06
11	0	141	-100.96
12	0	118	-110.18
13	0	157	-105.06
14	0	164	-100.12
15	0	156	-104.81
16	0	159	-101.27
17	0	149	-103.41
18	0	174	-104.47
19	0	155	-111.36
20	0	171	-97.13
21	0	164	-101.69
22	0	146	-92.23
23	0	167	-97.37
24	0	137	-102.00
25	0	189	-95.54
26	0	164	-108.20
27	0	122	-112.62
28	0	134	-115.79
29	0	147	-108.53
30	0	170	-120.29
31	0	152	-120.01
32	0	170	-117.01
33	0	165	-119.03
34	0	193	-111.62
35	0	154	-109.88
36	0	181	-116.49
37	0	188	-92.49
38	0	157	-112.17
39	0	140	-122.93

Sample Size = 5477

Table E.10

MEAN VALUES FOR ALL EARNERS BY MONTH									
MONTH	_TYPE_	_FREQ_	AVG_BEN	AVG_CH	AVG_GRSY	EXIT_RT	ENTRY_RT	AGEO_P	AFDC_P
1	0	288	96.678	.	531.175	0.059028	0.107639	0.0590278	0.218750
2	0	310	96.129	9.7231	523.118	0.077419	0.116129	0.0709677	0.248387
3	0	335	94.817	9.7515	530.097	0.080597	0.137313	0.0746269	0.253731
4	0	355	104.446	20.9124	523.443	0.078056	0.140845	0.0732394	0.242254
5	0	388	111.504	14.3282	518.995	0.087629	0.115979	0.0747423	0.244845
6	0	392	113.457	7.4322	522.561	0.084184	0.081633	0.0739796	0.252551
7	0	393	114.226	14.4758	518.618	0.091603	0.104326	0.0763359	0.251908
8	0	406	113.406	10.0099	515.315	0.064039	0.103448	0.0812808	0.266010
9	0	435	112.917	11.6074	514.385	0.075862	0.119540	0.0735632	0.252874
10	0	458	110.713	9.5624	517.969	0.104803	0.124454	0.0655022	0.233624
11	0	470	113.390	12.3798	526.013	0.082979	0.121277	0.0680851	0.225532
12	0	496	112.660	9.3259	522.894	0.092742	0.122984	0.0665323	0.221774
13	0	509	110.735	8.8313	525.750	0.096267	0.113949	0.0589391	0.220039
14	0	514	111.355	10.5235	525.521	0.103113	0.101167	0.0505837	0.210117
15	0	530	108.373	10.1086	529.412	0.101887	0.132075	0.0584906	0.213208
16	0	530	110.619	11.5771	531.557	0.086792	0.115094	0.0547170	0.196226
17	0	527	115.292	12.5870	523.604	0.085389	0.085389	0.0569260	0.193548
18	0	506	117.349	6.8840	524.848	0.094862	0.067194	0.0612648	0.205534
19	0	497	116.340	4.7931	535.308	0.092555	0.072435	0.0684105	0.225352
20	0	482	111.154	-0.7218	537.621	0.093361	0.064315	0.0809129	0.219917
21	0	487	109.645	7.5000	545.696	0.108830	0.104723	0.0739220	0.209446
22	0	499	112.115	12.3818	536.881	0.096192	0.138277	0.0681363	0.226453
23	0	516	110.645	8.8311	544.603	0.073643	0.122093	0.0620155	0.244186
24	0	532	113.021	10.0301	551.687	0.110902	0.097744	0.0639098	0.227444
25	0	543	120.672	16.7019	548.004	0.082873	0.119705	0.0552486	0.219153
26	0	562	123.380	13.2531	543.475	0.065836	0.099644	0.0516014	0.217082
27	0	592	127.207	12.0610	532.426	0.074324	0.096284	0.0472973	0.202703
28	0	624	131.976	17.7359	507.092	0.073718	0.123397	0.0432692	0.190705
29	0	642	136.255	12.2833	498.790	0.099688	0.096573	0.0420561	0.188474
30	0	627	135.000	11.2290	497.122	0.092504	0.087719	0.0366826	0.185008
31	0	592	132.186	1.7402	514.400	0.089527	0.054054	0.0422297	0.195946
32	0	598	130.128	3.5481	514.039	0.076923	0.063545	0.0418060	0.220736
33	0	601	129.591	5.2651	514.397	0.116473	0.069884	0.0432612	0.216306
34	0	576	128.058	6.5280	506.343	0.085069	0.083333	0.0451389	0.230903
35	0	600	124.125	8.3620	520.835	0.113333	0.111667	0.0466667	0.223333
36	0	595	121.157	6.8305	540.582	0.097479	0.090756	0.0420168	0.226891
37	0	574	127.093	6.8497	553.319	0.085366	0.064460	0.0452962	0.224739
38	0	591	126.764	5.9236	541.836	0.077834	0.082910	0.0406091	0.231810
39	0	589	122.510	8.0427	532.995	0.020374	0.083192	0.0390492	0.217317

Sample Size = 19761

Table E.11

MEAN VALUES FOR ALL AFDC CASES BY MONTH									
MONTH	_TYPE_	_FREQ_	AVG_BEN	AVG_CH	AVG_GRSY	EXIT_RT	ENTRY_RT	EARN_P	AGED_P
1	0	492	111.004	.	386.907	0.0304878	0.0447154	0.128049	0.0467480
2	0	527	113.095	9.6750	383.863	0.0436433	0.0796964	0.146110	0.0417457
3	0	552	112.842	8.7418	388.398	0.0380435	0.0815217	0.153986	0.0398551
4	0	597	122.840	19.5295	382.247	0.0251256	0.0938023	0.144054	0.0368509
5	0	628	125.410	9.1923	387.324	0.0270701	0.0557325	0.151274	0.0350318
6	0	660	128.460	9.7966	387.231	0.0303030	0.0560606	0.150000	0.0348485
7	0	691	133.461	9.6378	390.312	0.0289436	0.0593343	0.143271	0.0376266
8	0	728	134.340	9.2999	381.237	0.0274725	0.0604396	0.148352	0.0343407
9	0	736	135.536	5.4454	375.986	0.0597826	0.0366848	0.149457	0.0380435
10	0	744	136.602	9.6535	371.896	0.0389785	0.0631720	0.143817	0.0349462
11	0	754	135.654	5.7614	377.885	0.0424403	0.0530504	0.140584	0.0318302
12	0	778	135.853	6.6593	371.063	0.0437018	0.0552699	0.141388	0.0334190
13	0	790	136.158	6.1354	374.105	0.0443038	0.0493671	0.141772	0.0329114
14	0	785	137.342	5.2949	378.940	0.0420382	0.0369427	0.137580	0.0305732
15	0	803	138.975	6.2349	376.297	0.0672478	0.0485679	0.140722	0.0336239
16	0	784	141.247	5.4685	375.324	0.0408163	0.0357143	0.132653	0.0306122
17	0	786	141.413	5.1317	372.865	0.0521628	0.0343511	0.129771	0.0292621
18	0	772	142.406	3.9454	379.856	0.0453368	0.0272021	0.134715	0.0323834
19	0	771	141.885	4.5791	387.187	0.0402075	0.0389105	0.145266	0.0311284
20	0	770	141.943	4.4373	387.487	0.0480519	0.0363636	0.137662	0.0324675
21	0	764	141.580	3.5500	388.823	0.0366492	0.0353403	0.133508	0.0366492
22	0	781	141.333	6.5180	388.886	0.0268886	0.0524968	0.144686	0.0345711
23	0	817	139.736	5.8315	392.475	0.0281518	0.0575275	0.154223	0.0342717
24	0	841	141.899	8.5591	396.222	0.0428062	0.0523187	0.143876	0.0356718
25	0	850	145.959	9.9787	395.763	0.0388235	0.0435294	0.140000	0.0364706
26	0	860	150.040	8.4346	395.353	0.0232558	0.0430233	0.141860	0.0348837
27	0	863	151.852	4.9393	395.756	0.0336037	0.0220162	0.139050	0.0347625
28	0	861	154.725	5.8042	389.629	0.0267131	0.0278746	0.138211	0.0313589
29	0	877	155.108	3.4667	387.536	0.0399088	0.0262258	0.137970	0.0319270
30	0	882	157.571	6.5770	391.606	0.0374150	0.0351474	0.131519	0.0317460
31	0	885	157.528	4.9124	389.520	0.0361582	0.0338983	0.131073	0.0350282
32	0	890	156.761	3.3601	393.406	0.0382022	0.0314607	0.148315	0.0348315
33	0	878	155.116	4.4741	396.458	0.0410023	0.0330296	0.148064	0.0318907
34	0	883	155.924	5.0481	388.723	0.0430351	0.0339751	0.150623	0.0294451
35	0	895	154.315	5.1232	393.357	0.0324022	0.0446927	0.149721	0.0324022
36	0	910	153.334	4.2180	394.664	0.0395604	0.0329670	0.148352	0.0318681
37	0	907	153.561	5.1217	397.462	0.0474090	0.0396913	0.142227	0.0330761
38	0	901	152.094	4.2508	402.380	0.0355161	0.0388457	0.152053	0.0344062
39	0	895	153.554	5.9368	400.637	0.0100559	0.0189944	0.143017	0.0324022

Sample Size = 30588

Table E.12.

MEAN VALUES FOR ALL AGED CASES BY MONTH									
MONTH	_TYPE_	_FREQ_	AVG_BEN	AVG_CH	AVG_GRSY	EXIT_RT	ENTRY_RT	EARN_P	AFDC_P
1	0	303	45.6700	.	297.765	0.0099010	0.0363036	0.0561056	0.0759076
2	0	316	43.8984	2.47302	306.875	0.0158228	0.0569620	0.0696203	0.0696203
3	0	330	43.7264	2.60790	312.429	0.0121212	0.0575758	0.0757576	0.0666667
4	0	356	46.7437	7.84507	313.419	0.0112360	0.0870787	0.0730337	0.0617978
5	0	367	48.9562	2.64384	316.461	0.0136240	0.0326975	0.0790191	0.0599455
6	0	383	49.2808	3.02362	316.963	0.0339426	0.0469974	0.0757180	0.0600522
7	0	382	50.3868	1.89211	317.469	0.0157068	0.0261780	0.0785340	0.0680628
8	0	406	50.2500	3.32178	319.337	0.0221675	0.0689655	0.0812808	0.0615764
9	0	408	49.9337	1.29064	324.025	0.0294118	0.0269608	0.0784314	0.0686275
10	0	424	48.4455	1.48104	330.333	0.0235849	0.0566038	0.0707547	0.0613208
11	0	429	48.2717	0.61827	336.285	0.0093240	0.0303030	0.0745921	0.0559441
12	0	445	47.9616	1.22348	339.691	0.0314607	0.0404494	0.0741573	0.0584270
13	0	449	48.0805	1.68904	337.883	0.0445434	0.0334076	0.0668151	0.0579065
14	0	443	46.8141	0.19501	336.154	0.0158014	0.0225734	0.0586907	0.0541761
15	0	456	48.5727	3.47577	339.548	0.0241228	0.0394737	0.0679825	0.0592105
16	0	451	48.3497	1.27840	341.523	0.0266075	0.0155211	0.0643016	0.0532151
17	0	453	49.3459	2.62084	342.572	0.0331126	0.0286976	0.0662252	0.0507726
18	0	456	49.6689	1.81678	353.857	0.0241228	0.0307018	0.0679825	0.0548246
19	0	456	47.7555	0.47461	356.372	0.0263158	0.0219298	0.0745614	0.0526316
20	0	458	47.0022	0.35165	357.827	0.0349345	0.0218341	0.0851528	0.0545852
21	0	459	48.6031	1.93202	357.982	0.0305011	0.0261438	0.0784314	0.0610022
22	0	462	47.8649	1.44323	356.182	0.0411255	0.0324675	0.0735931	0.0584416
23	0	454	47.7832	-0.14856	360.350	0.0176211	0.0198238	0.0704846	0.0616740
24	0	461	46.1485	-0.39083	364.956	0.0477223	0.0281996	0.0737527	0.0650759
25	0	451	49.0268	3.14286	364.965	0.0288248	0.0221729	0.0665188	0.0687361
26	0	460	49.6346	2.35746	363.874	0.0152174	0.0369565	0.0630435	0.0652174
27	0	465	49.8160	1.83983	367.796	0.0322581	0.0236559	0.0602151	0.0645161
28	0	459	49.7917	2.21538	358.692	0.0174292	0.0196078	0.0588235	0.0588235
29	0	460	51.5175	2.65351	360.342	0.0260870	0.0195652	0.0586957	0.0608696
30	0	458	50.5793	0.68282	362.361	0.0131004	0.0240175	0.0502183	0.0611354
31	0	471	50.5441	1.79570	363.503	0.0233546	0.0297240	0.0530786	0.0658174
32	0	467	50.7223	0.73319	361.959	0.0235546	0.0128480	0.0535332	0.0663812
33	0	466	49.4630	0.75435	361.922	0.0236052	0.0193133	0.0557940	0.0600858
34	0	472	48.9936	1.83726	364.904	0.0338983	0.0317797	0.0550847	0.0550847
35	0	473	48.3897	0.92719	367.530	0.0401691	0.0295983	0.0591966	0.0613108
36	0	466	47.9067	0.42826	364.283	0.0493562	0.0128755	0.0556481	0.0622318
37	0	469	47.9226	1.54957	368.687	0.0277186	0.0426439	0.0554371	0.0639659
38	0	471	48.8627	1.53219	366.889	0.0148620	0.0276008	0.0509554	0.0658174
39	0	475	48.5957	1.01279	368.877	0.0126316	0.0168421	0.0484211	0.0610526

Sample Size = 16990

APPENDIX F

ANALYSIS OF THE INTERACTIONS BETWEEN THE FOOD STAMP PROGRAM AND OTHER TRANSFER PROGRAMS

The individual effects of legislative changes in the major income support programs were estimated using The Urban Institute's microsimulation model, the Transfer Income Model or TRIM2. TRIM2 simulates the detailed rules of the major income transfer programs (AFDC, SSI, and Food Stamps). The program rules are applied to a data base which includes the demographic and income characteristics of a sample of households representative of the entire United States. Typically, the Current Population Survey serves this purpose. TRIM2 can be used to simulate actual (historic) program rules, or alternative (counterfactual) program rules. Thus, the effects of counterfactual provisions on program costs or caseloads or on the incomes of populations served by these programs can be measured against historic outcomes. The effects of the interactions between programs are captured since these are built into the TRIM2 model.

There were significant legislative changes in all of the major income support programs during the 1981-1983 period. Tables F.1 through F.5 summarize the significant federal legislative changes in AFDC, SSI, Social Security, Food Stamps, and Unemployment Insurance, respectively. In this task the effects of the legislative changes in each of these programs on food stamp caseload and benefits were measured. In general, the pre-OBRA rules in these programs were used as counterfactual parameters in TRIM2, and these outcomes were compared to the historic post-OBRA simulation results.

The March 1984 Current Population Survey, representative of 1983 family income circumstances, was used as the initial data base. Thus, the estimates

Table F.1

SUMMARY OF SIGNIFICANT FEDERAL LEGISLATIVE CHANGES IN AID TO FAMILIES WITH DEPENDENT CHILDREN:
JANUARY 1981 THROUGH DECEMBER 1983

Provision	Prior Law	Current Law, 1983	Legislation
Eligibility tests:			
Gross income	none	150% of State need standard ¹	1981 OBRA
Net income	100% state payment standard	at least \$10 below state payment standard	1981 OBRA
Deductions from gross income:			
\$30 and 1/3 earned income disregard	applied before other deductions	applied last; ² only available for 4 months ²	1981 OBRA
work expenses	no cap	standard \$75 deduction for full-time work ³	1981 OBRA
child care	no cap	capped at \$160 per child for full-time work	1981 OBRA
Other income:			
lump sum payments	could cause loss of eligibility for 1 month	lump sum amount/family's need amount = number months of lost eligibility	1981 OBRA
stepparent income	not considered in AFDC benefit determination unless children adopted	a portion of stepparent's income is considered available to the AFDC assistance unit	1981 OBRA
Resources limit:	up to \$2,000/person in some states; home and auto may be counted	\$1,000/household maximum, home and auto excluded	1981 OBRA
Benefit:	determined prospectively; rounded to closest \$1	determined retrospectively; rounded to lower \$1; prorated in first month	1981 OBRA 1982 TEFRA
Reporting requirements:	monthly reporting not required	families must report monthly unless state obtains waiver	1981 OBRA
Eligibility of special groups:			
strikers	eligible	not eligible for payment if caretaker relative on strike on last day of month	1981 OBRA
dependent children	eligible through age 20 if attending school	eligible through age 18 if in high school	1981 OBRA
pregnant women	eligible	eligible in 6th-9th months	1981 OBRA
family with unemployed parent	eligible if father unemployed	eligible if principal wage earner unemployed	1981 OBRA

1. Increased to 185% by the Deficit Reduction Act of 1984.

2. The Deficit Reduction Act of 1984 made a \$30 disregard available for 8 months after the "\$30 and 1/3" expires.

3. The Deficit Reduction Act of 1984 established the \$75 standard for part-time as well as full-time workers.

SUMMARY OF SIGNIFICANT FEDERAL LEGISLATIVE CHANGES IN SOCIAL SECURITY:
JANUARY 1981 THROUGH DECEMBER 1983

Provision	Prior Law	Current Law	Legislation
Minimum benefit	Benefits based on the higher of an individual's own PIA or a minimum PIA	eliminated for new beneficiaries effective Nov. 1981 and for current beneficiaries effective March 82; restored for workers who attain 62 or die before 1982	1981 OBRA 1981 Social Security Amendments
Survivor benefits for students	benefits available through age 22	benefits for students 18-22 phased out, except for secondary students under 19	1981 OBRA
Benefits for widows <60	eliminated when youngest child turns 18	eliminated when youngest child turns 16	1981 OBRA
Initial benefit	benefit may be paid in first month of partial eligibility	delay benefit until first full month of eligibility	1981 OBRA
Rounding of benefits	to next higher 10¢	to lower \$1	1981 OBRA
Cost of living increases	3.5% increase due July 1983	COLA delayed to January 1984	1983 Social Security Amendments
Taxation of benefits	Social Security benefits not taxable	taxation of up to 1/2 of benefits in households where AGI + 1/2 Social Security exceeds \$25,000 for an individual, \$32,000 for a couple (effective for 1984 tax year)	1983 Social Security Amendments

Table F.3

SUMMARY OF SIGNIFICANT FEDERAL LEGISLATIVE CHANGES IN SUPPLEMENTAL SECURITY INCOME:
JANUARY 1981 THROUGH DECEMBER 1983

Provision	Prior Law	Current Law	Legislation
Monthly benefit	determined prospectively; rounded to nearest \$1	determined retrospectively; initial benefit prorated to application date; benefit rounded down to lower \$1; Social Security benefits not examined retrospectively in first months after a COLA to eliminate windfall	1981 OBRA 1982 TEFRA
Income deductions home energy assistance	not deductible	deductible	1982 TEFRA
in-kind assistance from non-profit organizations	not deductible	deductible	1982 TEFRA
Maximum benefit	increased on same schedule as Social Security, by amount of Social Security COLA	subject to Social Security 6 month COLA delay from July 1983 to January 1984; benefits increased \$20/month for individuals and \$30/month for couples in July 1983	1983 Social Security Amendments
Eligibility of homeless persons	not eligible	eligible for up to 3 months each year if resident of public emergency shelter	1983 Social Security Amendments
State "pass through" of federal COLA	states must either (a) provide at least the level of supplementation to each category of recipient provided in December 1976; or (b) maintain supplementation expenditures at the level of the prior year	state using method (a) must maintain supplementation amounts in effect in March 1983, and in July 1983 must "pass through" at least a 3.5% increase (rather than full federal increase)	1983 Social Security Amendments

Table F.4

SUMMARY OF SIGNIFICANT FEDERAL LEGISLATIVE CHANGES IN UNEMPLOYMENT INSURANCE:
JANUARY 1981 THROUGH DECEMBER 1983

Provision	Prior Law	Current Law	Legislation
Triggering of extended benefits			
computation of insured unemployment rate	ratio of average number of insured unemployed persons in last 13 weeks to average number in covered employment in the state	computation excludes current EB recipients from "insured unemployed"	
national trigger	available in all states when national insured unemployment rate averages 4.5%	discontinued	1981 OBRA
state triggers	available in a state if (a) its 13 week IUR is at least 4% during the same period and is 20% higher than in the prior 2 years; (b) at state option, when the state IUR is at least 5%	available in a state if (a) its IUR is at least 5% and is 20% higher than in the prior 2 years; (b) at state option, when the state IUR is at least 6%	1981 OBRA
Interest on federal loans to state UI programs	not charged	interest of up to 10% charged on loans made to states after April 1, 1982; states with high unemployment may defer interest; states may qualify for deferred interest if steps taken to improve program solvency	1981 OBRA 1982 TEFRA Social Security Amendments of 1983
Trade Adjustment Assistance (TAA)	available concurrently with regular UI	available only when regular UI exhausted	1981 OBRA
Unemployment for Ex-Service Members (UCX)	not restricted based on type of discharge, opportunity for re-enlistment or length of service; ex-service members can receive benefits for 26 weeks	eliminated for individuals who could have re-enlisted, or who had a less than honorable discharge; restored for honorably discharged veterans who completed their first full term of service; they can obtain up to 13 weeks of benefits based on military employment	1981 OBRA Miscellaneous Revenue Act of 1982
Federal Supplemental Compensation	"third tier" of benefits available during 72-73 and 75-77 recessions brought maximum UI duration to 52 weeks in 72-73, 65 weeks in 75-77	authorized for September 1982 through March 1983, with 6-10 FSC weeks; FSC weeks increased to 8-16; FSC extended through September 1983 at 8-14 weeks, 6-10 if had previously received FSC, for maximum UI duration of 65 weeks;	1982 TEFRA 1982 Surface Transportation Assistance Act 1983 Social Security Amendments
Taxation of UI benefits	taxable if income > \$20,000 for an individual, > \$25,000 for a joint return	taxable if income > \$12,000 for an individual, > \$18,000 for a joint return	1982 TEFRA
		FSC extended through March 1985 at 8-14 weeks	Federal Supplemental Compensation Amendments

Table F.5
SUMMARY OF SIGNIFICANT FEDERAL LEGISLATIVE CHANGES IN THE FOOD STAMP PROGRAM:
JANUARY 1981 THROUGH DECEMBER 1983

Provision	Prior Law	December 1983 Law	Legislation
Eligibility test for Non-elderly/disabled household	net income 100% of poverty	gross income 130% of poverty; and net income 100% of poverty	1981 OBRA; 1982 Food Stamp Amendments
Deductions from income: Standard deduction	updated each January; rounded to nearest \$5	update postponed from January 1982 to October 1983; updated each October, rounded to lower \$1	1981 OBRA and 1982 Food Stamp Amendments
Dependent care/excess shelter deduction for non-elderly/disabled	subject to cap updated each January; cap rounded to nearest \$5	cap update postponed from January 1982 to October 1983; updated each October; cap rounded to lower \$1	1981 OBRA and 1982 Food Stamp Amendments
Separate dependent care deduction	to be effective October 1981	repealed prior to implementation	1981 OBRA
Earned income	20% of earned income deductible	18% deductible	1981 OBRA
Excess medical costs of elderly/disabled	monthly costs over \$35; to be costs over \$25 as of October 1981	monthly costs over \$35 (change to \$25 repealed prior to implementation)	1981 OBRA
Maximum Allotment	updated each January based on projected cost of Thrifty Food Plan; rounded to lower \$1	update postponed from January 1982 to October 1982; updated each October based on 99% of cost of Thrifty Food Plan*	1981 OBRA; 1981 and 1982 Food Stamp Amendments
Initial benefits	full monthly benefit	prorated to application date; no benefit <\$10	1981 OBRA; 1982
Accounting and reporting period for eligibility	Calculated prospectively; rounded to nearest \$1	Calculated retrospectively; rounded to lower \$1; earners and potential earners must report monthly (mandatory implementation delayed until January 1984 under subsequent legislation)	1981 OBRA; 1982 Food Stamp Amendments
Eligibility of special groups:			
boarders	eligible	ineligible	1981 OBRA
strikers	eligible	eligible only if eligible immediately prior to strike	1981 OBRA
children living with non-elderly/non-disabled parents	may file separately	must file as one household	1981 OBRA
non-elderly/non-disabled siblings	may file separately	must file as one household	1982 Food Stamp Amendments
college students	eligible if head of household or spouse of head, or participant in federal work/study program, WIN, or part-time work (at least 20 hours per week)	eligible only if working part-time (at least 20 hours per week); participating in federal work/study; responsible for a child <6; or if on AFDC	1982 Food Stamp Amendments

*Public Law 98-473 returned the basis for adjustment to 100 percent of the cost of the Thrifty Food plan effective November 1984.

represent the program effects in 1983, holding constant other economic circumstances of families. In addition, since the microsimulation model cannot capture any behavioral effects of legislative changes, the estimates represent the total effect in the absence of any household behavioral change.

The following six simulations were produced:

- 1) Pre-OBRA rules for AFDC, SSI, Social Security, and Food Stamps;
- 2) Post-OBRA rules for AFDC, combined with pre-OBRA rules for SSI, Social Security, and food stamps;
- 3) Post-OBRA rules for AFDC and SSI, combined with pre-OBRA rules in Social Security and food stamps;
- 4) Post-OBRA rules for AFDC, SSI, and Social Security, combined with pre-OBRA Food Stamp Program rules;
- 5) Post-OBRA rules for AFDC, SSI, Social Security, and food stamps; and
- 6) Post-OBRA rules for AFDC, SSI, Social Security, and Food Stamps, combined with a counterfactual assumption regarding the total amount of Unemployment Insurance benefits.

Simulations 2 through 4 are counterfactuals which show the marginal effect of adding the post-OBRA rules in AFDC, SSI, and Social Security to the first simulation, which is a baseline of all programs as they would have existed had OBRA never been implemented. Simulation number 5 includes the actual post-OBRA rules in all programs, and the difference between this simulation and simulation number 4 is solely due to the changes in the Food Stamp Program. The last simulation is a counterfactual designed to demonstrate the significance of UI benefit programs for the food stamp caseload and benefits. As explained below, it is not a true counterfactual in the sense that pre- and post-OBRA UI benefit rules were simulated,¹ but it assumes that more monies would have been allocated to UI benefits in 1983, increasing the

1. The TRIM2 model does not include a detailed simulation of UI benefit rules.

number of unemployed person with benefits. All other simulations used the CPS reported amount of UI benefits.

Not all of the provisions shown in Table F.1 through F.5 were simulatable, but those that were excluded are relatively insignificant.¹ Table F.6 shows the legislative changes that were simulated. These can be cross-referenced with the details of the actual legislation presented earlier. The significance of the provisions omitted for each of the programs is discussed below.

For AFDC all of the legislative provisions during the 1981-1983 period were simulated except the changes in the treatment of other income (a portion of stepparent's income is now counted and a single lump sum payment can cause loss of eligibility in more than 1 month), proration, family reporting requirements, and eligibility for strikers and pregnant women. Of those provisions omitted, the treatment of stepparent income had the most significant effect on the AFDC program, but the interaction effect with the Food Stamp Program probably would not have been significant. The AFDC quality control survey showed that about 6 percent of AFDC units had stepparents in May 1981 compared to 3 percent in May 1982.² Presumably some families with stepparents lost their AFDC eligibility as a result of this OBRA provision. An effect on the food stamp caseload would not have been expected, however.

Table F.6

SIMULATED CHANGES IN PROGRAM LEGISLATION

Program	Legislation
AFDC	<ol style="list-style-type: none"> 1. Eligibility tests <ol style="list-style-type: none"> a. Introduction of gross income test b. Net income must be at least \$10 below state payment standard 2. Deductions <ol style="list-style-type: none"> a. \$30 and 1/3 earned income disregard applied as last deduction and only available for 4 months b. Cap on standard work expense deduction c. Cap on child care expenses 3. Resource limit reduced to \$1000 4. Eligibility of special groups <ol style="list-style-type: none"> a. Reduction in age of eligibility of children to 18
SSI	<ol style="list-style-type: none"> 1. Maximum benefit: COLA delay from July 1983 to January 1984; benefit increase of \$20/month for individuals and \$30/month for couples in July 1983
Social Security	<ol style="list-style-type: none"> 1. Cost of living increase: COLA delayed from July 1983 to January 1984
Food Stamps	<ol style="list-style-type: none"> 1. Eligibility test <ol style="list-style-type: none"> a. Gross income test of 130% of poverty introduced for non-elderly/disabled, combined with 100% net income test 2. Deduction <ol style="list-style-type: none"> a. Standard deduction frozen from January 1982 to October 1983 b. Dependent care excess shelter deduction frozen from January 1982 to October 1983 c. Earned income deduction reduced to 18% of earnings 3. Maximum allotment: frozen from January 1982 to October 1982; based on 99% cost of Thrifty Food Plan 4. Eligibility of special groups: students eligible only if head of household

an increase in food stamp benefits for families who retained food stamp eligibility but lost AFDC benefits. The potential size of this effect would be small, however, since the number of families who lost their AFDC benefits as a result of the stepparent's income provision was small relative to the total food stamp caseload.¹

The change in the SSI maximum benefit levels due to the simultaneous COLA delay and the permanent benefit increase was simulated. This was the only SSI program provision likely to affect the food stamp caseload and benefits. Similarly, only the COLA delay for Social Security beneficiaries was simulated, but this was the only provision likely to have a significant effect on the Food Stamp Program.

All of the important Food Stamp Program provisions were simulated. The one possible exception was the omission of the effect of the repeal of two provisions which were scheduled to go into effect in October 1981 but were recinded by the OBRA legislation. These were the addition of a separate dependent care deduction and the \$10 reduction in the medical cost exclusion for the elderly. These provisions were simulated separately and found to have an insignificant (.2 percent) effect on food stamp costs. The reason why they were not significant was that so few households claim these deductions. In August 1982, for example, only 1.7 percent of all food stamp households claimed the dependent care deduction, and 2.2 percent claimed the medical deduction. It may be true, however, that the additional dependent care deduction would have been claimed by more households. As mentioned earlier, the simulation cannot capture behavioral change. Estimates of the behavioral

1. At most, the benefits of 1.2 percent of the food stamp caseload would have been affected.

effect of these provisions must remain purely speculative, however, since the legislation recinded provisions which never took effect.

As mentioned earlier, the Unemployment Insurance benefits counterfactual was not an attempt to precisely simulate the pre- and post-OBRA UI program rules. TRIM2 does not include this type of simulation module. Rather, this was an attempt to provide a scenario which demonstrated the sensitivity of the Food Stamp Program to the availability of UI benefits. Recently Vroman (1984) estimated the total dollar effect of the federal changes in UI shown in F.5. He reported that the changes in the federal UCX and TAA programs¹ represented a \$1.0 billion cut in benefits in 1983, and that the federal extended benefits policies resulted in a \$4.4 billion cut in benefits for the long-term unemployed. Vroman also concluded that federal policies caused a \$3.3 billion reduction in state-provided regular UI benefits. The Vroman study represents a careful attempt to estimate the effects of the OBRA and TEFRA legislation on UI benefits. However, the estimates were based on an analysis of time series data and are, of course, subject to standard statistical error.

The UI counterfactual simulation assumes that \$5.4 billion additional dollars would have been paid out in benefits in 1983. All of the additional monies were distributed to unemployed persons without reported UI benefits in 1983. Benefits were distributed based upon historical receipt of benefits for unemployed persons disaggregated into 8 sex-age groups (men and women age 16-19, 20-24, 25-44, and 45 and older). The effect of a reduction in state benefits was not included, since assignment of federal responsibility for these cutbacks is somewhat speculative.

1. UCX: Unemployment for Ex-Service Members; TAA: Trade Adjustment Assistance.

Tables F.7 through F.9 show the results of the first four counterfactual simulations and the post-OBRA historic simulation. Shown are the net effects of the legislation on the population eligible for and receiving food stamps; the effects on households by their gross income levels as a percent of poverty; effects on average food stamp benefits for both eligible and participant households. Table F.10 presents the effects of the UI counterfactual simulation. The TRIM2 food stamp participant estimates were selected from the total pool of eligible households using a probability function. The TRIM2 probability function was based upon an analysis of historic participation patterns comparing the Food Stamp Quality Control data on participants to monthly estimates of eligibles in the Current Population Survey. The implications of the results presented in Tables F.7 through F.10 are discussed in Chapters III and VI.

Table F.7

NET EFFECT OF LEGISLATION IN OTHER TRANSFER PROGRAMS ON THE FOOD STAMP CASELOAD:
CHANGE IN HOUSEHOLDS ELIGIBLE OR RECEIVING FOOD STAMP BENEFITS DURING 1983¹

	(1)	(2)	(3)	(4)	(5)	(6)
<u>Number (000) of Food Stamp Households</u>	<u>Pre-OBRA Rules</u>	<u>AFDC Effect</u>	<u>SSI Effect</u>	<u>Social Security Effect</u>	<u>Total Interaction Effect</u>	<u>Food Stamp Effect</u>
Total Eligible Caseload	19,801	+ 6	- 22	- 1	- 17	- 1311
With AFDC	3,688	- 131	0	+ 2	- 129	- 21
With Earnings	13,133	+ 11	- 4	- 2	- 5	- 1174
With SSI	2,348	+ 75	+ 39	+ 59	+ 173	- 49
With Social Security	4,592	- 2	- 18	- 8	- 28	- 169
With Other Income	3,469	+ 22	- 1	+ 13	+ 34	- 245
Total Participant Caseload	9,955	- 46	- 8	+ 37	- 17	- 389
With AFDC	3,661	- 118	- -	+ 2	- 116	- 13
With Earnings	5,445	- 71	- 1	- -	- 72	- 312
With SSI	2,045	+ 53	+ 43	+ 50	+ 146	- 52
With Social Security	2,488	+ 28	+ 19	+ 21	+ 68	- 97
With Other Income	1,453	- 20	+ 3	+ 7	- 10	- 59

SOURCE: TRIM2 estimates based on March 1984 Current Population Survey

1. Estimates show the number of households who would be eligible for or receiving food stamps at some time during the year

Table F.8

EFFECT OF LEGISLATION IN OTHER TRANSFER PROGRAMS ON THE FOOD STAMP CASELOAD:
CHANGE IN FOOD STAMP HOUSEHOLDS BY GROSS INCOME AS PERCENT OF POVERTY

Number of Households Eligible for Food Stamps During 1983 (In Thousands)						
Annual Gross Income As A Percent of Poverty	(1) <u>Pre-OBRA Rules</u>	(2) <u>AFDC Effect</u>	(3) <u>SSI Effect</u>	(4) <u>Social Security Effect</u>	(5) <u>Total Interaction Effect</u>	(6) <u>Food Stamp Effect</u>
50% or Less	3,793	+ 39	- 8	+ 3	+ 34	- -
51 - 100%	7,163	+ 37	- 25	- 12	- 3	- -
101 - 130%	3,138	- 51	+ 10	+ 9	- 32	- 149
131% and Over	5,709	- 19	+ 1	+ 2	- 16	- 1162
Total	19,801	+ 6	- 22	- 1	- 17	- 1311

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Number of Households Receiving Food Stamps During 1983						
Annual Gross Income As A Percent of Poverty	(1) <u>Pre-OBRA Rules</u>	(2) <u>AFDC Effect</u>	(3) <u>SSI Effect</u>	(4) <u>Social Security Effect</u>	(5) <u>Total Interaction Effect</u>	(6) <u>Food Stamp Effect</u>
50% or Less	2,220	+ 21	- 8	+ 4	+ 17	- -
51 - 100%	4,478	+ 29	- 21	+ 10	+ 18	- -
101 - 130%	1,256	- 58	+ 21	+ 13	- 23	- 85
131% and Over	1,952	- 39	- -	+ 10	- 29	- 303
Total	9,955	- 46	- 8	+ 37	- 17	- 388

SOURCE: TRIM2 estimates based on March 1984 Current Population Survey

Table F.9

NET EFFECT OF LEGISLATION IN OTHER TRANSFER PROGRAMS ON AVERAGE ANNUAL FOOD STAMP BENEFIT
AND AVERAGE ANNUAL GROSS INCOME FOR FOOD STAMP HOUSEHOLDS IN 1983

	(1)	(2)	(3)	(4)	(5)	(6)
<u>Households Eligible For Food Stamps</u>	<u>Pre-OBRA Rules</u>	<u>AFDC Effect</u>	<u>SSI Effect</u>	<u>Social Security Effect</u>	<u>Total Interaction Effect</u>	<u>Food Stamp Effect</u>
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Average Food Stamp Benefit	583	+ 1	- 2	- -	- 1	+ 19
Non-Elderly Households						
Average Gross Income	9,624	- 34	+ 3	- -	- 31	- 596
Average Food Stamp Benefit	639	+ 1	- 1	+ 1	+ 1	+ 25
Elderly Households						
Average Gross Income	5,974	+ 40	+ 23	+ 7	+ 70	- 104
Average Food Stamp Benefit	417	+ 2	- 10	- 1	- 9	- 15
	(1)	(2)	(3)	(4)	(5)	(6)
<u>Households Receiving Food Stamps</u>	<u>Pre-OBRA Rules</u>	<u>AFDC Effect</u>	<u>SSI Effect</u>	<u>Social Security Effect</u>	<u>Total Interaction Effect</u>	<u>Food Stamp Effect</u>
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Average Food Stamp Benefit	1,157	+ 8	- 8	- 2	- 2	- 5
Non-Elderly Households						
Average Gross Income	8,210	- 67	+ 5	- 1	- 63	- 299
Average Food Stamp Benefit	1,305	+ 18	- 4	- -	+ 14	+ 2
Elderly Households						
Average Gross Income	5,429	+ 35	+ 17	+ 8	+ 60	- 75
Average Food Stamp Benefit	765	- 8	- 17	- 8	- 33	- 23

SOURCE: TRIM2 estimates based on March 1984 Current Population Survey

Table F.10

ESTIMATES OF THE EFFECTS OF AN INCREASE IN THE NUMBER
OF UNEMPLOYED PERSONS WITH UNEMPLOYMENT INSURANCE
BENEFITS DURING 1983

<u>Program Estimate</u>	<u>Post- OBRA¹</u>	<u>Unemployment Insurance Counterfactual²</u>
UI Benefits (Billions)	\$19.6	\$25.0
Persons with UI Benefits (000)	10,104	12,574
Food Stamps Eligibles		
Households, Ever-on (000)	18,478	16,953
Benefits (Billions)	\$18.814	\$17.018
Food Stamp Participants		
Households, Ever-on (000)	9,571	8,763
Benefits (Billions)	\$10.999	\$9.921

SOURCE: Historical post-OBRA UI benefits as reported in March, 1984 Current Population Survey. UI counterfactual and Food Stamp benefits are simulated estimates.

1. Historical simulation, includes post-OBRA legislation in all programs, including Food Stamps.

2. Counterfactual simulation assumes pre-OBRA legislation in federal UI programs (UCX, TAA) and an increase in extended benefits.