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U.S. Family Food Programs: An Interstate Comparison

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CONTENTS

Introduction 1
The Programs 3
Participation Rates. 6
The Subsidy Effects. 11
Summary. 16
Appendix 18

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U.S. FAMILY FOOD PROGRAMS:
AN INTERSTATE COMPARISON

G. L. Seevers and W. G. Leshner

Introduction

Individual states receive financial support from the federal government to operate programs of food assistance to needy families. Two family food programs are available. One involves direct commodity distribution and the other is the food stamp program. Both were originally enacted into law during the 1930's. Although the food stamp program operated only five years (1939 to 1943) before it was discontinued, the commodity distribution program has been funded continuously since 1936. The food stamp program was renewed on a pilot basis in 1961 and since then has been steadily expanded.^{1/} Current administrative plans call for continued expansion of the food stamp program and eventual elimination of direct commodity distribution.

The programs reached about 10 million persons during periods of peak participation in the 1930's and early 1940's.^{2/} Following World War II, participation decreased sharply, reaching a low of 58,000 in 1946. Participation remained relatively low through 1954, when about one million received

^{1/} An excellent summary of the family food programs, including their history and objectives, is given in: D. M. Hoover and J. G. Maddox, "Food For the Hungry", National Planning Association Pamphlet No. 126, February 1969.

^{2/} See Table 1 of the Appendix for a listing of participation numbers and federal costs of the programs for the years 1936-1970.

family food assistance. Participation then increased steadily to over six million in 1961, and remained at that level during most of the 1960's. Beginning in late 1969 and continuing into 1970, there has been a significant increase in participation. Peak participation in August 1970 was estimated at 11 million, the highest level since the early years of the programs. Growing political pressure to alleviate hunger has contributed to expanded funding for family food programs and, in turn, the recent upsurge in participation.

Even though participation has been increasing, the programs continue to reach only a fraction of the population classified as poor.^{3/} At peak monthly participation, only 28 percent of persons qualifying as poor participated in 1969, and 40 percent in 1970. Even more important, participation levels vary widely among states. In May 1968, when national participation was at its peak for that year, the percentage of the poor population participating in the programs ranged from a low of 2 percent to a high of 53 percent. Because of the low and variable participation rates, a study was undertaken to determine why participation varied among states, and the effects of the interstate variation on the benefits (subsidies) each state received from the programs.^{4/} This

^{3/} For the purpose of this report, the U.S. Department of Agriculture (USDA) and Social Security Administration definition of "poor" is employed. This definition includes families that have incomes less than three times the estimated food costs of the USDA's economy food plan. For a family of four, the estimated cost was \$1,200 in March 1970. The maximum income that the family could earn and still be classified as poor was therefore \$3,600.

^{4/} The study was based on fiscal year 1968, the most recent year all the necessary data could be collected. Details are given in: W. G. Leshner, "An Analysis of the United States' Family Food Programs, by States," unpublished M.S. thesis, Oregon State University, June 1970.

report reviews the programs and summarizes the results of that study.

The first phase of the study was designed to determine possible causes of variation in participation among states. Phase 2 determined how the varying participation rates and average benefits per participant in each state influenced the subsidies (federal payments) received by the states. To estimate the interstate subsidy effects due to the family food programs, the federal payments under the two programs for each state were compared with the state's federal tax contribution. These federal payments also were compared with the payments that would have resulted if each state had received federal expenditures in proportion to its poor population. This comparison provided an indication of each state's utilization of the programs in 1968.

The Programs

Family food programs are administered by the U.S. Department of Agriculture. They are designed to reduce the cost of food to eligible families. The direct commodity distribution program offers a bundle of foods (up to 24 different types) at no monetary cost to recipient families. The commodities are offered monthly to recipients at local distribution centers in counties offering this program. Once a family establishes its eligibility to participate, they have few other obligations. For example, no restrictions are placed on how a family spends its available income and assets.

The food stamp program provides food (at reduced costs) to recipient families in a manner different from the commodity distribution program. Families participating in the program purchase stamps from local banks or welfare offices in accordance with the USDA-determined issuance tables. The cost of stamps

is designed to equal the amount the family would normally spend on food. In addition to the purchased stamps, a family receives bonus (free) stamps. Families with very low incomes receive more bonus stamps than those with higher incomes. After receiving the stamps, the family uses them to purchase food items at designated retail food stores. They cannot purchase imported foods, tobacco, alcoholic beverages, soap, and other nonfood products. Once the family purchases food, the retailer returns the stamps to the distributing banks for reimbursement.

To be eligible, a family's income must not exceed the maximum income standards set by each state. These standards vary with family size and are similar to the income standards for public assistance in each state. As shown in Figure 1, income standards vary among states. Also, both programs have liquid asset (checking and savings accounts) levels which the participating families cannot exceed and still be eligible to participate.

County governments serve as the local administrative unit for family food programs. Officials may elect to offer either the commodity distribution or food stamp program, but not both. In May of 1968, approximately one-third of the 3,129 counties in the United States did not offer any program. With rapid program expansion since then, only 67 counties remained without a program by October 1970, and 57 of these counties had plans to implement one. In contrast to this essentially total coverage, only 83 percent of the U.S. population was living in an area with a family food program in May of 1968. There were 12 states which had 100 percent of their populations living in a food program area, while in three states, less than 25 percent of the population lived in a program area.

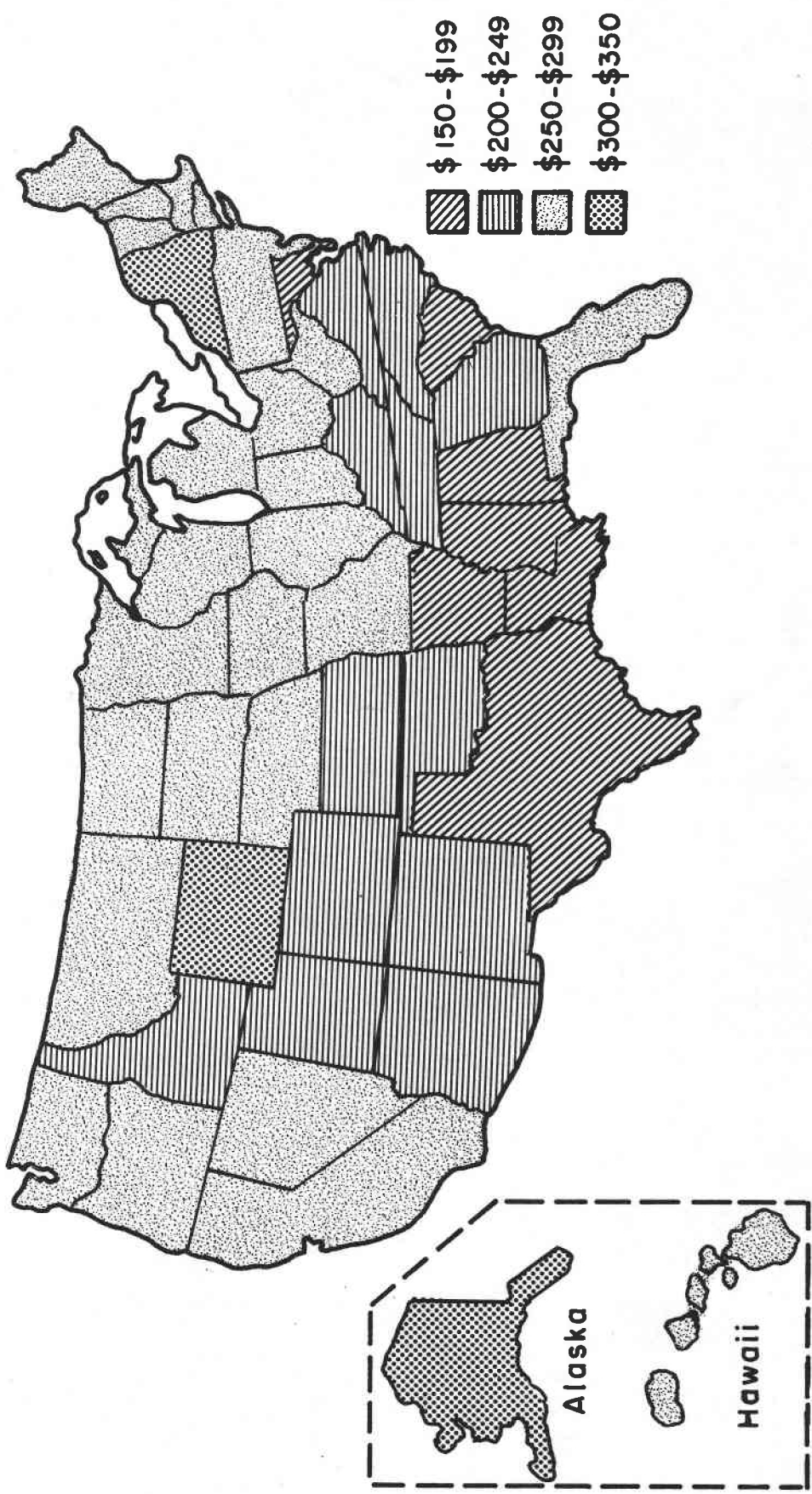


Figure 1. Maximum income eligibility standards for participation in family food programs, monthly income for a family of four, 1968.

Along with expansion to counties that previously offered no program, there has been a shift from direct commodity distribution to the food stamp program. This has been encouraged by federal policies, particularly by decreased costs of food stamps. There is a waiting list of counties seeking approval to switch from commodity distribution to the food stamp program. Although budget ceilings for food stamps have increased significantly, they have not kept pace with the applications by counties wishing to switch from commodity distribution.

Participation Rates

Phase 1 of the study examined participation rates by states. These are given in Table 1 based on participation in May 1968. It should be emphasized that the results would be different for 1970 participation. States with limited programs in 1968 would show much higher participation as additional counties adopted a program.

Participation rates were defined as the proportion of the estimated number of poor in each state who participated in a family food program. A preferable definition would have been the proportion of eligible persons who participated, but estimates of eligible persons are not available on either a state or national basis. If this information had been available, participation rates shown in Table 1 would have been somewhat higher because eligibility standards are more restrictive than the definition of the poor population in each state.

Several possible explanations were hypothesized for the variation of participation rates. First, eligibility standards (maximum allowable monthly income) for a base family of four differ considerably among states, as shown

Table 1. Participation Rates Among States for the Family Food Programs, May 1968

State	Participation rates (percent) ^{a/}	State	Participation rates (percent) ^{a/}
Alabama.....	28	Montana.....	26
Alaska.....	2	Nebraska.....	9
Arizona.....	38	Nevada.....	12
Arkansas.....	22	New Hampshire....	13
California.....	17	New Jersey.....	15
Colorado.....	25	New Mexico.....	38
Connecticut.....	29	New York.....	35
Delaware.....	53	North Carolina...	13
Florida.....	15	North Dakota.....	21
Georgia.....	19	Ohio.....	26
Hawaii.....	17	Oklahoma.....	48
Idaho.....	8	Oregon.....	37
Illinois.....	19	Pennsylvania.....	21
Indiana.....	13	Rhode Island.....	26
Iowa.....	13	South Carolina...	6
Kansas.....	9	South Dakota.....	21
Kentucky.....	23	Tennessee.....	17
Louisiana.....	15	Texas.....	10
Maine.....	14	Utah.....	23
Maryland.....	14	Vermont.....	20
Massachusetts....	11	Virginia.....	3
Michigan.....	24	Washington.....	34
Minnesota.....	18	West Virginia....	29
Mississippi.....	47	Wisconsin.....	18
Missouri.....	17	Wyoming.....	19

^{a/} Estimates of the number of poor in each state were obtained from: "Senate Select Committee on Nutrition and Human Needs," a committee print containing a statistical summary of poverty, malnutrition, and federal food programs in the U.S. U.S. Senate, September 1969, p. 9. The participation data were obtained from USDA publications of participation statistics in 1968.

in Figure 1. For example, the high state (New York) maintained a monthly allowable income of \$338, while the low state (South Carolina) had an allowable income of \$160 per month. It was expected that a state with more generous eligibility standards would have a higher participation rate than one with lower standards, if other factors were the same for both states.^{5/}

A second possible explanation for widely varying participation rates was the proportion of each state's population living in counties offering a family food program. Some states had several counties which did not offer either program. To illustrate, only 16.5 percent of Virginia's population lived in program counties (May 1968); in contrast, 100 percent of the population in 12 states lived in a program county.

A third factor which was expected to affect participation was the type of program offered. Seven states offered only commodity distribution, while five states conducted only the food stamp program. The remaining states had counties on each of the programs. Nationally, counties on commodity distribution experienced higher participation rates than those on the food stamp program. Also, of all the counties during 1961-1968 which switched from commodity distribution to food stamps, there was a net decline in participation of approximately 40 percent. Thus, a state with the majority of its counties on food stamps was expected to have a lower participation rate than a state primarily

^{5/} This expectation must be qualified. States with lower eligibility standards (lower allowable incomes) tend to have a higher proportion of their poor populations with very low incomes. If families with lower incomes are more likely to participate, eligibility standards alone would not accurately explain participation.

on commodity distribution. This expectation would not apply, now that federal policies have made participation in the food stamp program more attractive.

Although these were the three principal explanations, additional ones were advanced that could also be tested by statistical regression analysis. The regression analysis permitted the influence of each explanation to be identified separately. The results, however, supported only the second explanation -- that as programs expand to cover a larger proportion of the population, participation rates will increase. This conclusion was not surprising, and its significance in further increasing participation is now limited, because all but a handful of counties offer programs. Based on the analysis, the other variables used in the statistical test did not explain the variation in participation among states. This means that a change in eligibility standards, type of programs offered, or the other possible explanations tested would not significantly affect participation.^{6/}

Because of the inability to explain participation rates, an alternative explanation was hypothesized, although we were not able to test it in this study. This explanation was termed state-local resistance, and is illustrated by restrictive policies followed by some states and counties. The states and counties have considerable autonomy in the administration of food programs. There are several stages at which the way programs are administered can either encourage participation or present a barrier to potential recipients.

^{6/} This statement should not be interpreted to mean that any program change will fail to affect participation. For example, an increase in bonus stamps provided for each purchased food stamp has contributed to the sharp rise in participation since 1968.

1. The certification process for eligibility is often complex and sometimes degrading, causing potential recipients to delay, discontinue, or forego participation, even though they would be eligible.
2. Information may be inadequate, so that many potentially eligible people do not know about the programs.
3. In some cases, food offices are not close to the recipients, forcing them to drive up to 150 miles to pick up commodities or purchase stamps.
4. All the commodities available from federal sources may not be offered in some cases, causing participation to be relatively unattractive.
5. Only a few counties allowed participants to purchase stamps or pick up commodities more than once a month. More frequent pickup and purchase dates encourage participation, because families do not have to accumulate the required sum of money all at one time (food stamp), nor do they have storage problems (commodity distribution).
6. Some states and counties have special rules, such as providing food assistance only to unemployables, only on a seasonal basis, or requiring residency requirements in order to qualify.

These potential restrictions were a pervasive problem in 1968. To some extent they are being corrected. Nevertheless, the fact remains that states with very similar characteristics had much different participation rates in 1968. For illustrative purposes, Louisiana and Mississippi can be compared. Both states are in the same geographic region, and both had comparable income eligibilities (\$165 per month in Louisiana, compared to \$180 in Mississippi, for a family of four). Louisiana and Mississippi had populations of 3,710,000 and 2,349,000 respectively, with 859,208 and 781,946 estimated poor in each respective state. Yet Louisiana's participation rate was 15 percent, while Mississippi's was 47 percent. Further comparisons could be made between states having comparable characteristics but exhibiting widely different participation rates.^{7/}

Based on the study, the following alternative explanation was tentatively adopted: individual states (and counties within states) have a great deal of influence over participation through the way they handle and administer the programs. This can be viewed negatively as passive administration or outright resistance to establishing an effective program to reach the state's poor. Or it can be viewed in a positive context: states that decide to conduct an effective program have the capacity to reach this goal, as indicated by the strong performance of several individual states listed in Table 1.

The Subsidy Effects

This phase of the study concentrated on the interstate subsidy effects that resulted from the family food programs. These effects are not necessarily

^{7/} For example, Delaware and Massachusetts, Nebraska and Oklahoma, Indiana and Ohio, Alabama and South Carolina, California and Oregon.

undesirable. Indeed, such effects naturally result from programs funded by more affluent states (through income taxes) and designed to assist the poor. The purpose here was to quantify the extent to which family food programs lead to subsidy effects.

To determine the subsidy effects, the benefits and costs for each state were calculated. The benefits (B) were defined as the monetary value the state received from the federal government for the purpose of operating the family food programs within the state. This included the value of the commodities the government supplied to the participants (based on retail value), plus the value of the bonus stamps issued to the recipients of that state.^{8/} The benefits can be divided into two components: (1) the number of participants (participation rate multiplied by number of poor), and (2) the benefits per participant (either the value of bonus stamps or the value of commodities distributed).

The costs (C) were defined as the proportion of the federal expenditures for the two food programs the state supported by its federal income tax contributions. These costs were found for each state by multiplying the total federal government expenditures for the food stamp and commodity distribution programs by the fraction of the total U.S. income tax bill paid by each state. For example, if a state paid 5 percent of the total U.S. income tax bill, then its calculated cost was 5 percent of the total federal family food programs expenditures. State administrative costs were excluded because they were not available for all states.

^{8/} The bonus stamps can be viewed as reducing the cost of food to participating families so that their food expenditures go further.

To arrive at the subsidy effects, the costs were subtracted from the benefits. These are shown under the B-C heading in Table 2. A positive sign denotes a subsidy to that state via the food programs; conversely, a negative sign indicates a subsidy from the state to other states.

As shown in Table 2, the actual subsidy effects were quite large. For example, Mississippi had the largest net gain, \$25.2 million, while New York state experienced the largest net loss, \$32.4 million. Alabama, West Virginia, Arkansas, Kentucky, Tennessee, and Oklahoma all had rather large positive subsidy effects, although much less than Mississippi. The positive subsidies for these states resulted not only from large numbers of participants and/or high benefits per participant, but also from relatively low federal tax payments.

Each state's benefits also were compared to what the state would have received if its benefits had been in proportion to its poor population. This measure (B*) was obtained by multiplying the proportion of the U.S. poor residing in each state by the total federal expenditures for the programs. A state with 2 percent of the nation's poor would have a B* equal to 2 percent of total federal expenditures on the family food programs. This figure was then subtracted from the actual benefits to acquire some idea of the effects of the combination of varying participation rates and benefits per participant among states. A state with a high participation rate and high benefits per participant would have a large B relative to B*. In effect, B-B* provided an indication of a state's effectiveness in using the family food programs.

The B-B* values could be either positive or negative. A positive value meant that the state received greater federal benefits than it would have,

Table 2. A State-by-State Analysis of Subsidy Effects of Family Food Programs, 1968

State	B (benefits)	C (costs)	thousands of dollars		B-B* (difference) ^{a/}
			B-C (benefits - costs)	B-C (benefits - costs)	
1 Alabama.....	\$11,266	\$ 1,863	\$ 9,402	\$ 1,195	
2 Alaska.....	150	197	-47	-122	
3 Arizona.....	2,112	1,018	1,094	-157	
4 Arkansas.....	8,934	900	8,034	2,843	
5 California.....	13,582	25,657	-12,075	-2,306	
6 Colorado.....	3,494	3,214	280	1,237	
7 Connecticut.....	2,253	5,074	-2,822	546	
8 Delaware.....	791	1,851	-1,060	260	
9 Florida.....	5,304	4,957	347	-4,634	
10 Georgia.....	8,857	4,130	4,727	-2,018	
11 Hawaii.....	664	731	-66	-71	
12 Idaho.....	280	560	-280	-612	
13 Illinois.....	10,277	22,001	-11,724	-168	
14 Indiana.....	3,877	6,409	-2,532	-2,603	
15 Iowa.....	2,833	2,166	717	-1,332	
16 Kansas.....	1,034	1,771	-737	-1,992	
17 Kentucky.....	12,023	4,136	7,887	3,808	
18 Louisiana.....	7,698	2,531	5,168	-1,612	
19 Maine.....	651	682	-31	-953	
20 Maryland.....	3,772	6,794	-3,022	-9	
21 Massachusetts.....	1,335	7,894	-6,559	-3,277	
22 Michigan.....	9,049	20,998	-11,949	266	
23 Minnesota.....	4,141	4,839	-697	-522	
24 Mississippi.....	26,050	882	25,168	17,577	
25 Missouri.....	5,029	7,162	-2,133	-2,566	
26 Montana.....	1,459	406	1,054	524	
27 Nebraska.....	1,158	1,567	-409	-1,074	
28 Nevada.....	135	511	-377	-122	
29 New Hampshire.....	241	641	-401	-385	
30 New Jersey.....	3,172	9,721	-6,549	-1,688	

Continued

Table 2. (Continued)

State	B (benefits)	C (costs)	B-C (benefits - costs)	B-B* (difference) ^{a/}
	----- thousands of dollars -----			
31 New Mexico.....	\$ 4,280	\$ 564	\$ 3,716	\$ 2,273
32 New York.....	17,702	50,120	-32,418	947
33 North Carolina.....	8,128	5,921	2,206	-4,847
34 North Dakota.....	1,096	312	788	-124
35 Ohio.....	18,702	16,814	1,878	7,805
36 Oklahoma.....	9,376	2,597	6,779	4,467
37 Oregon.....	3,005	1,911	1,094	1,110
38 Pennsylvania.....	17,216	17,437	-221	3,631
39 Rhode Island.....	1,263	1,287	-24	288
40 South Carolina.....	2,893	1,378	1,515	-4,615
41 South Dakota.....	1,087	331	755	-371
42 Tennessee.....	10,420	2,724	7,696	494
43 Texas.....	9,330	11,135	-1,805	-12,127
44 Utah.....	1,001	672	329	25
45 Vermont.....	492	315	177	-145
46 Virginia.....	1,673	4,172	-2,499	-6,302
47 Washington.....	5,433	3,822	1,610	2,565
48 West Virginia.....	10,029	929	9,010	5,429
49 Wisconsin.....	3,712	5,113	-1,400	-672
50 Wyoming.....	509	202	306	139

^{a/} Difference between benefits actually received and benefits that would have been received if distribution had been on the basis of the proportion of the nation's poor in each state.

based solely on the size of its poor population. For no subsidy effect (the benefits distributed exactly in proportion to each state's poor population), the B-B* values would have been zero for each state.

As an indication of a state's effectiveness in using family food programs, the positive figure of \$17.5 million for Mississippi far exceeded other states. Other states having values over a million dollars are Ohio, West Virginia, Oklahoma, Pennsylvania, Arkansas, Washington, New Mexico, Alabama, Colorado, and Oregon. Texas had the most adverse utilization of food programs, followed by Virginia, North Carolina, Florida, South Carolina, and Massachusetts.^{9/}

Summary

The essence of the family food programs study conducted with fiscal 1968 data centered around two objectives: (1) analyzing the varying participation rates among states, and (2) studying the interstate subsidy effects.

To analyze the varying participation rates, several explanations were hypothesized, and all but one (state-local resistance) were tested. Only one explanation, the proportion of a state's population living in a food program area, was statistically significant. And this variable is no longer important, because all but a few counties were on one of the programs by mid-1970. Therefore, an alternative explanation was tentatively adopted: namely, that state-local resistance (if it could be tested) would account for much of the difference in participation rates among states.

^{9/} The total effects given in Table 2 do not take account of differences in the number of poor among states. Again, it should be emphasized that information based on 1969 and 1970 data would be expected to show quite different results for some states that have expanded their programs in the past two years.

For the subsidy effects section, it was found that there were major interstate income transfers (B-C) due to the family food programs. These subsidy effects were not surprising since, by the purpose of the program, transfers were to be expected. But the subsidy effects (B-B*), based on distributing benefits in proportion to the number of poor in a state, showed significant deviations from zero. This reflected the effects of varying participation rates and benefits per participant, and provided an indication of each state's utilization of family food programs.

The implications of the study are somewhat limited because the state-local resistance explanation for varying participation rates was not tested. If the resistance explanation is valid, then more uniform national program regulations and procedures may be necessary to increase participation rates and the general utilization of the programs. Even so, state-local resistance would be difficult to eliminate, and probably could continue to thwart the national objectives of improving the diets of low-income families through food programs.