Welfare Measures and Inequality Between 1981 and 1995

Table 2 represents the baseline analysis for households that meet the gross income test to receive food stamps. This table contains the headcount ratio, income gap, Gini coefficient, Sen index, real household income, real per capita income, and household size. In addition, we have calculated the Gini coefficient for those households that participate in the food stamp program. This Gini coefficient is calculated after adding the actual value of food stamps received to household income. This statistic will then give an indication of how effective the food stamp program is in evening out the dispersion of income among food stamp recipients. However, the main focus of this report is still on the demographic characteristics of the population eligible for food stamps, regardless of whether they participate in the food stamp program. We also note that a standard error could be calculated for the statistics that we report. The easiest way to do this would be by bootstrapping our estimates. However, the majority of studies that report such statistics do not usually calculate a standard error.

The headcount ratio indicates that the percentage of households eligible to receive food stamps declined from 27 percent in 1981 to 21 percent in 1989, before rising to 24 percent in 1993 and declining again to 22 percent in 1995. For the entire sample period, the headcount averaged 24 percent. Importantly, the income gap also declined from 44 percent in 1981 to 38 percent in 1995 and averaged 41 percent between 1981 and 1995. This statistic represents the average percentage deviation of income from 130 percent of the poverty line for the poor population. The Gini coefficient measures the degree of inequality among the poor, and this, too, fell from 0.36 to 0.32, averaging 0.33 for all years. The Sen index summarizes the headcount, income gap, and the Gini coefficient, so it too fell from 0.38 in 1981 to 0.33 in 1995, with an average value of 0.36. Real income for households eligible for food stamps has increased over this period from $4,735 in 1981 to about $5,387 in 1995. This is a very modest increase of 14 percent, whereas per capita income ranged from $2,058.70 in 1981 to $2,154.65 in 1995, an increase of about 5 percent.

In order to determine if a group is better or worse off over time, one has to look at measures of dispersion along with a measure of average income. In looking at the Sen index, real household income, and real per capita income, we can conclude that poor households in 1995 were slightly better off than in 1981. First, there were proportionally fewer poor households, and second, they had more income in real terms, although the income gains were rather modest as indicated above. However, we do need to note that those who left the ranks of poor households, approximately 5 percent of all households, were the real winners. A reduction in the number of households at or below 130 per-

Table 2—Welfare measures of food stamp-eligible households (incomes less than or equal to 130 percent of the poverty line)

Year	Components of Sen index			Sen index	Gini coefficient with food stamps	Real household income	Per capita income	Household size
	Headcount ratio	Income gap	Gini coefficient					
						------1981 dollars------		Number
1981	0.27	0.44	0.36	0.38	0.35	4,735.02	2,058.70	2.3
1983	.26	.42	.33	.37	.31	4,832.78	2,101.21	2.3
1985	.25	.42	.33	.36	.32	4,986.12	2,077.55	2.4
1987	.22	.41	.31	.35	.30	5,039.55	2,099.81	2.4
1989	.21	.40	.31	.34	.30	5,095.61	2,123.17	2.4
1991	.23	.41	.32	.35	.30	5,094.25	2,037.70	2.5
1993	.24	.40	.32	.35	.30	5,252.13	2,100.85	2.5
1995	.22	.38	.32	.33	.31	5,386.62	2,154.65	2.5
Average	.24	.41	.33	.36	.31	5,052.76	2,094.21	2.4

Source: U.S. Department of Agriculture, Economic Research Service.

cent of the poverty line would also be consistent with an increase in average income for the total population, and therefore, an increase in general welfare. Note too that the Gini coefficient for households that participate in the food stamp program is slightly below the Gini coefficient of all households eligible for food stamps. The Gini coefficient for households that received food stamps was about 6 percent below the Gini coefficient for all households eligible for food stamps in 1983 and about 3 percent below in 1995 and averaged about 6 percent below for the entire time period. This indicates that those households derived positive benefits from participating in the Food Stamp Program and that needy families other than those at or near 130 percent of the poverty line have participated and realized higher average incomes.