

Summary

California's Food Stamp Participation Rate, 1999 - 2001: Impact of Family Composition and Benefits for Aged and Disabled

Eva Y. Seto, Jon Stiles, and Henry E. Brady¹
UC DATA, University of California, Berkeley

Estimates of the California food stamp participation rate by the United States Department of Agriculture Food and Nutrition Service (USDA/FNS) are significantly biased downwards because they do not appropriately consider two distinctive features of California: its large population of ineligible immigrants and the fact that Supplemental Security Income (SSI) recipients receive food stamp equivalents via California's food stamp cash-out. Whereas USDA/FNS calculates a food stamp participant access rate in California of 44% for 1999², we estimate a food stamp participation rate of 80% for the same calendar year. Our estimate of the rate for 1999 increases from 44% to 58% due to the exclusion of ineligible immigrants, and from 58% to 80% as a result of the food stamp cash-out for SSI recipients. For 2000 and 2001 we estimate the rates to be 80% and 78%, respectively. Our calculations indicate that using appropriate comparisons, California's participation rates for these years substantially exceed the corresponding national rates.

Calculating a Food Stamp Participation Rate

The food stamp participation rate (PR) measures how many of those eligible for food stamps actually receive food stamps.

$$PR = \# \text{ Receiving Food Stamps Assistance} / \# \text{ Eligible for Food Stamps Assistance}$$

While it is possible to determine exact counts of those receiving food stamp assistance, it is impossible to determine exactly how many people would be eligible for food stamp assistance. Exact eligibility is determined by a complex set of rules involving income, assets, and citizenship status among other things. In order to accurately calculate a food stamp participation rate, estimates of the eligible population must be made.

¹ Eva Y. Seto and Jon Stiles are research analysts at UC DATA, University of California, Berkeley. Henry E. Brady is a Professor of Political Science and Public Policy at the University of California, Berkeley. Points of view or opinions expressed in this document are those of the author(s) and do not necessarily represent the official position or policies of the Regents of the University of California or the California Department of Social Services.

² We use 1999 as a base year for comparing participation rates because this allows us to use the larger sample sizes from the 2000 census microdata to model eligibility for non-citizens. The income and program participation items in the 2000 census use the 1999 calendar year for the reference period.

USDA/FNS calculates a food stamp participation rate by first calculating how many people receive food stamps. Using administrative data they add the number of people participating in either the Food Stamp program or the Food Distribution Program on Indian Reservations (FDPIR).³ The number of people eligible for food stamps is estimated using Census figures of the number of people falling below the poverty threshold minus SSI recipients in poverty.

$$PR_{FNS}^4 = \frac{\# \text{ Receiving Food Stamps} + \# \text{ Receiving FDPIR}}{\# \text{ People in Poverty} - \# \text{ on SSI in Poverty}}$$

Based on this methodology, the **PR_{FNS} for California in 1999 is 44%**.

The USDA hired Mathematica Policy Research, Inc. to estimate a participation rate that takes into account other eligibility criteria, such as citizenship or documentation status. Mathematica's estimate of **PR_{MATH}⁵ for California in 1999 is 52%**.

Neither of these methodologies accurately account for two distinctive features of California which affect food stamp eligibility. The first feature is the large number of ineligible immigrants in the state. The second feature is that in California SSI recipients are not eligible for food stamps. Instead, SSI recipients "cash-out" food stamp benefits and receive additional amounts in their benefits to compensate for food stamps.

Unauthorized Immigrants in California

According to United States Immigration and Naturalization Service (INS) estimates, California is home to more than 2 million unauthorized immigrants. This number is close to one-third of the national population of unauthorized immigrants, and the largest number in any state in the country. Nationally, only 2.5% of the population is unauthorized, while 6.5% of California's population is unauthorized. This is the largest percentage of any state in the country.

To accurately estimate the number of people eligible for food stamps, one must consider the federal restrictions on food stamp eligibility that are based on citizenship or documentation status. Specifically, for non-citizens to be eligible for food stamps they must meet specific requirements. First, they must be a "qualified alien" -- either a Legal Permanent Resident (LPR) or an asylee or refugee. Second, they must meet one of the following criteria: (1) be an LPR with 40 quarters of work, (2) be elderly and lawfully residing in the U.S on August 22, 1996, (3) be a child lawfully residing in the U.S. on August 22, 1996, or (4) be blind or disabled. (These criteria reflect the regulations governing eligibility during 1999, 2000, and 2001. More restrictive criteria were in place

³ FDPIR participants cannot also participate in the Food Stamps program. Since the programs offer similar services and those on Indian Reservations can choose to participate in either program, FDPIR recipients are considered the same as Food Stamp program recipients.

⁴ FNS as a subscript indicates that this is the USDA/FNS calculation.

⁵ MATH as a subscript indicates that this is the Mathematica calculation.

directly prior to 1999, and criteria were made less restrictive effective in 2003). Clearly any estimate of eligibility that includes citizenship and documentation status must consider people's age and year of entry.

Based on estimates of the undocumented population and characteristics of the remaining non-citizens, we adjust the pool of persons in poverty to reflect limitations on eligibility. Our calculations suggest that only a small percentage -- about 5% -- of non-citizens entering the country since 1996 are potentially food stamp eligible. A larger fraction, about 30%, of entrants between 1990 and 1996 could participate in the program, and nearly 67% of non-citizens entering before 1990 could participate.

Using this additional information, we estimate the food stamp participation rate to be:

$$PR_{XNC}^6 = \frac{\# \text{ Receiving Food Stamps} + \# \text{ Receiving FDPIR}}{\# \text{ People in Poverty} - \# \text{ Non-citizen Ineligibles} - \# \text{ on SSI in Poverty}}$$

We estimate this as **PR_{XNC} for 1999 = 54%**.

We can further refine this by considering the additional effect of the presence of an unauthorized immigrant to his/her household. For the purposes of determining the food stamps eligibility of a household containing an unauthorized individual, a portion of the income of unauthorized persons is deemed to the remaining eligible members of the household. The inclusion of this income can make the household food stamp ineligible based on income requirements. Taking this into account we revise our estimate of the food stamp participation rate to be:

$$PR_{XNCH}^7 = \frac{\# \text{ Receiving Food Stamps} + \# \text{ Receiving FDPIR}}{\# \text{ People in Poverty} - \# \text{ Non-citizen Ineligibles} - \# \text{ Removed from Poverty} - \# \text{ on SSI in Poverty}}$$

We estimate this as **PR_{XNCH} for 1999 = 58%**.

SSI and Food Stamp Eligibility in California

In California Supplemental Security Income (SSI) recipients are categorically ineligible for food stamp benefits. Instead their food stamp benefits are "cashed-out" in the form of additional cash. This additional cash benefit can be found in the State Supplementary Payment (SSP).

California is the only state in the country that cashes-out food stamp benefits for SSI recipients. All other states offer food stamp benefits to eligible SSI recipients. California's state supplement to SSI is one of the most generous in the country.

In calculations of the food stamp participation rate for states other than California, those receiving food stamps include many SSI recipients in the numerator who are excluded in

⁶ XNC as a subscript indicates that this is our calculation excluding non-citizens ineligible.

⁷ XNCH as a subscript indicates that this is our calculation excluding ineligible non-citizen households.

California. SSI/SSP recipients in California, who receive a food stamp equivalent, should also be included in the numerator. Based on living arrangements and SSI grant amounts, we estimate that 80% of those receiving SSI/SSP would be food stamp eligible if food stamps weren't cashed-out in California. This more appropriate adjustment treats SSI/SSP recipients in the same fashion as FDPIR recipients and recipients who combine SSI and food stamps in other states.⁸

Estimates of the participation rate by USDA/FNS and Mathematica attempt to adjust for the food stamp cash-out in California by excluding SSI recipients from both the numerator and denominator. This is an inadequate adjustment for two reasons: first, SSI recipients are particularly likely to participate in the food stamp program nationally -- Mathematica's estimates of food stamp participation in households with SSI income are near 100% -- and so their exclusion only in California deflates estimates of participation in California. It also ignores the fact that California SSI recipients receive a benefit explicitly recognized as the equivalent to the food stamp benefit.

Including this adjustment factor we would get:

$$PR_{\text{SUMMARY}}^9 = \frac{\# \text{ Receiving Food Stamps} + \# \text{ Receiving FDPIR} + 80\% \text{ of } \# \text{ Receiving SSP}}{\# \text{ People in Poverty} - \# \text{ Non-citizen Ineligibles} - \# \text{ Removed from Poverty}}$$

This estimated **PR_{SUMMARY} for 1999 is 80 %**.

Food Stamp Participation Estimates for 2000 and 2001

Based on data for 1999, the simple food stamp participation rate (**PR_{FNS}**), differed substantially from more carefully considered estimates. To extend those estimates for later years¹⁰ we looked at changes in each of the components we use: counts of food stamp participants, poverty rates, estimates of the ineligible non-citizen population in poverty, the households of ineligible immigrants, and the population receiving SSI/SSP. The table below reflects the extension of the estimates discussed earlier to 2000 and 2001, considering these factors.

⁸ USDA/FNS inappropriately corrects for CA cash-out of food stamps by excluding from the denominator those who are in poverty and receive SSI (note the second term in the denominator of **PR_{FNS}**).

⁹ SUMMARY as a subscript indicates that this calculation includes all the discussed adjustments.

¹⁰ Estimates of the denominator components (persons in poverty, number of non-citizens by period of entry, poverty status of non-citizens and SSI recipients) for 2000 and 2001 are based on data drawn from the March Supplement to the Current Population Survey for 2001 and 2002. The samples for these surveys are much smaller than the 2000 Census, and the confidence interval around these estimates is larger.

Table 1: Food Stamp Participation Rates for California

California			
	1999	2000	2001
PR _{FNS}	44 %	42 %	40 %
PR _{MATH}	52 %	53 %	(not yet available)
PR _{XNC}	54 %	50 %	48 %
PR _{XNCH}	58 %	57 %	53 %
PR _{XNCH_SSI} ¹¹	58 %	57 %	53 %
PR _{SUMMARY}	80 %	80 %	78 %

In California, counts of food stamp recipients fell fairly steeply from 1999 to 2001: the decline between 1999 and 2000 was about 10%, followed by an additional decline of slightly under 5% between 2000 and 2001. SSI/SSP reciprocity rose slightly during the same period, although the 40,000 person increase in SSI/SSP between 1999 and 2001 is much smaller than the 285,000 person decline in the average number of monthly food stamp participants. The net effect of the declines in these administrative counts which comprise the numerator is to drive down participation rates for each of the estimates.

The denominator also fell during the period, acting to moderate the declines in the numerator and leading to an overall participation rate that fell only slightly. Most significant to the denominator was the slight fall in the poverty rate during this period. While there were increases in the number of ineligible non-citizens, fewer of them were in poverty and the net impact of changes among the non-citizen population in the denominator was small. Generally, the denominator decreased over time due to a falling poverty rate. This decrease in the denominator was not large enough to counteract the accompanying decrease in the numerator and the participation rate fell a small amount during this period.

Comparing California to the Rest of the Nation

The adjustments we have made to California's food stamp participation rate are large in size due to California's disproportionate share of ineligible non-citizens and direct provision of food stamp benefits via the SSI state supplement. Making similar adjustments to the remainder of the nation also affect calculations of the participation rate, but to a lesser degree.

Table 2 below provides estimates of adjusted participation rates for the nation excluding California.¹² As well as the four rates discussed earlier, we calculate an additional participation rate PR_{XNCH_SSI}.¹³ USDA/FNS excludes the SSI population from their

¹¹ XNCH_SSI as a subscript indicates that our calculation excluding SSI recipients, explained later.

¹² We take all other states excluding California together as a whole. While it would be possible to treat each state individually, we have not done so. Preliminary state level participation rates estimated for 1999 correlate highly (0.87) with rates calculated by Mathematica.

¹³
$$PR_{XNCH_SSI} = \frac{\# \text{ Receiving Food Stamps} + \# \text{ Receiving FDPIR} - \# \text{ Receiving SSI and FS}}{\# \text{ People in Poverty} - \# \text{ Non-citizen Ineligibles} - \# \text{ Removed from Poverty} - \# \text{ on SSI in Poverty}}$$

estimates of participation in California.¹⁴ We apply the same approach to other states in order to provide comparable measures of the food stamp participation rate among the non-SSI population. In other states, PR_{XNCH_SSI} is equal to PR_{XNCH} among the non-SSI population. In California, PR_{XNCH_SSI} is equivalent to PR_{XNCH} . While this measure is useful as an illustration of the differences in food stamp participation rate between non-SSI recipients, the rate $PR_{SUMMARY}$ is our preferred measure of the overall food stamp participation. This rate is calculated for a consistent population across states: it includes the high participation SSI recipients and it excludes ineligible non-citizens. It also recognizes the food-stamp benefit incorporated in the SSP payment in California.

Table 2: Food Stamp Participation Rates for the Nation Excluding California

Nation Excluding California			
	1999	2000	2001
PR_{FNS}	58 %	58 %	56 %
PR_{XNC}	60 %	61 %	59 %
PR_{XNCH}	60 %	65 %	63 %
PR_{XNCH_SSI}	55 %	59 %	57 %
$PR_{SUMMARY}$	60 %	65 %	63 %

Table 3 illustrates how our adjustments for SSI recipients and ineligible non-citizens clearly affect California more than the rest of the nation. Without any adjustments, California's participation rate is only 71-76% of the remainder of the country. After our adjustments, California's food stamp participation rate is either similar to (using PR_{XNCH_SSI} which excludes SSI recipients) or exceeds (using the most appropriate measure $PR_{SUMMARY}$) all other states taken together.

Table 3: Ratio of Food Stamp Participation Rates: California Relative to Remainder of Nation

Ratio of California to Remainder of Nation			
	1999	2000	2001
PR_{FNS}	.76	.73	.71
PR_{XNC}	.91	.83	.82
PR_{XNCH}	.96	.87	.84
PR_{XNCH_SSI}	1.06	.96	.93
$PR_{SUMMARY}$	1.32	1.24	1.24

California's rates for the three years 1999 through 2001 exceed national food stamp participation rates by thirteen or more percentage points each year.

¹⁴ Since SSI recipients are barred from receiving food stamps in California and therefore are not counted in the numerator, USDA-FNS excludes SSI recipients in poverty from the denominator as well.

Table 4: National Food Stamp Participation Rates

United States			
	1999	2000	2001
PR_{FNS}	56 %	55 %	54 %
PR_{MATH}	58 %	59 %	(not yet available)
PR_{XNC}	59 %	59 %	58 %
PR_{XNCH}	60 %	63 %	62 %
PR_{XNCH_SSI}	55 %	58 %	56 %
PR_{SUMMARY}	63 %	67 %	65 %

Conclusion

The effect of inappropriately accounting for the high percentage of ineligible non-citizens and the cash-out of food stamp benefits for SSI recipients in California leads to estimates of food stamp participation that are too low. We find that, after making reasonable assumptions, calculations of the food stamp participant access rate by USDA/FNS are only half as large as they should be. A much more appropriate estimate for the food stamp participation rate in California for 1999, 2000, and 2001 would be 80%, 80%, and 78%, respectively. Inclusion of adjustments for ineligible non-citizens also raises participation rates for the remainder of the country, but to a lesser extent. Overall, these adjustments raise California's rate from well below the national average to about 25% above the remainder of the country.