## Tiering's Effect on the Number of CACFP Family Child Care Homes

With the lower reimbursement rates, Tier 2 homes received only about half as much revenue from CACFP meal reimbursements as they would have received at the Tier 1 rates. The providers therefore had much less economic incentive to participate in the program. The question for the study was whether this reduced incentive would translate into a lower number of homes participating in the CACFP.

The analyses summarized in this section indicate that the number of CACFP homes in 1999 was significantly less than it would have been in the absence of tiering. The total number of CACFP homes declined about 10 percent from 1996 to 1999. The analysis indicates that, had tiering not been implemented, the number of CACFP homes would have grown slightly over that period.

The decrease in CACFP homes did not lead to a corresponding decrease in the overall number of participating children. Average daily attendance in 1999 was down just 2 percent from 1996, while the number of homes declined by 10 percent. The number of children in Tier 1 homes grew over this period, however, while the number in Tier 2 homes fell.

The analyses reported in this section are based principally on CACFP administrative data series maintained by USDA/FNS. Analyses controlling for economic and population trends use data from the U.S. Census Bureau, the Bureau of Labor Statistics, and the Bureau of Economic Analysis. The analyses are presented in full in Hamilton et al., E-FAN-02-002.

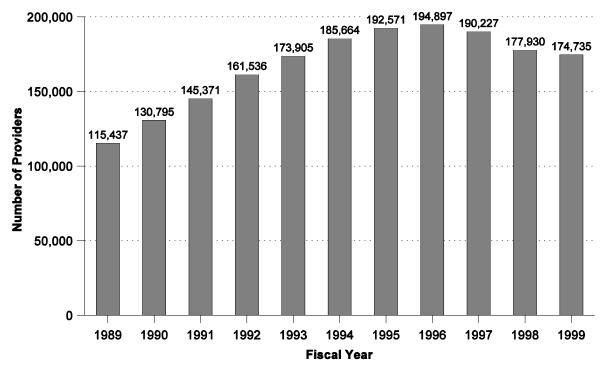
## The Number of CACFP Family Child Care Homes

The number of family child care homes participating in the CACFP grew rapidly in the early 1990s. The growth rate slowed in the middle part of the decade, started to decline in 1997, and continued declining through 1999. That pattern, shown in Exhibit 6, suggests that tiering might have reduced the number of participating homes. It is inconclusive by itself, however, because several economic and policy features of the child care environment were changing in ways that could have affected the number of CACFP homes.

Chief among the possible alternative explanations for the 1997-99 decline is the strong economy. Unemployment reached the lowest levels of the decade and real wages, which had declined or

Data on numbers of homes come from program administrative records maintained by the USDA Food and Nutrition Service.

**Exhibit 6 Number of CACFP Family Child Care Homes** 



Source: CACFP administrative data.

stagnated through the earlier 1990s, grew in 1997-98.<sup>16</sup> This meant that the providers or potential providers of family child care had better alternative employment opportunities than existed previously in the decade. Another possible factor is the nationwide population of children ages 1-5 (the main age range served in CACFP homes), which grew slowly in the early 1990s and then slowly declined. Further possible sources of influence include changes in State policies for licensing homes, the growth of preschool education programs, and changing parental preferences for family child care homes or day care centers.

To isolate the effect of tiering, a multivariate analysis modeled the relationship between the number of CACFP providers in each State and an array of State-level economic, demographic, and policy factors in the 9 years before tiering (1989-97). This model was used to project the number of

From 1989 to 1996 the national unemployment rate rose from 5.3 percent to a peak of 7.5 percent and then fell back to about its beginning level of 5.4 percent. It then continued downward in 1997-99, reaching 4.2 percent in 1999. (Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics.) Mean inflation-adjusted wages per retail job fluctuated in the range of \$15,200 to \$15,500 between 1989 and 1996, then grew to \$15,900 in 1997 and \$16,600 in 1998 (the most recent year for which data are available). (Source: calculations by USDA, Economic Research Service, based on data series maintained by the U.S. Department of Commerce, Bureau of Economic Analysis: SA07 and SA27.)

CACFP homes that would have been expected in 1998 and 1999 based on the economic and demographic trends in those years. This analysis is described in Hamilton et al., E-FAN-02-002.

The analysis indicates that, based on economic and demographic trends, one would have expected the number of CACFP homes in 1998 and 1999 to have grown slightly from the 1996 level (Exhibit 7). In fact, the actual number of homes in 1999 was 14 percent less than would have been expected. A second analysis shows that the difference between the actual and the predicted number of homes was closely related to the proportion of each State's child care providers who were likely to be classified as Tier 2 (this proportion is not known directly, but was proxied by measures of children's household income, as described in Hamilton et al., E-FAN-02-002). Thus, the evidence suggests that tiering was responsible for the observed decline in the number of CACFP homes in 1998 and 1999.

## Sources of the Tiering-Related Reduction in CACFP Homes

Tiering could lead to reductions in the number of CACFP homes in two ways. First, some existing CACFP providers could elect to leave the CACFP, either quitting the child care business entirely or continuing to provide care without participating in the CACFP. Second, new providers who would previously have enrolled in the CACFP might now choose not to do so, or individuals who would have entered the child care business might not do so.

No direct information is available on nonenrollees, but survey data provide some insight into the providers leaving the CACFP. The survey tracked a nationally representative sample of 1,971 providers who were participating in the CACFP in January 1997 but who were not participating in January 1998. One key objective was to determine whether these providers stopped providing child care or left the CACFP but continued as family child care homes. Another was to get the providers' own statements about the role of tiering in their decisions.

Exhibit 7
<b>Estimated Effect of Tiering</b>

Year <sup>a</sup>	Actual Number of CACFP Homes	Predicted Number of CACFP Homes Without Tiering	Actual-Predicted Difference in Homes	Difference as Percent of Predicted Homes
1996	194,190			
1997	193,510			
1998	179,039	197,476	-18,437	-9.3%
1999	175,201	203,576	-28,375	-13.9%

a Analysis years are constructed to run from July 1 to June 30; e.g., 1996 begins on July 1, 1995.

Source: CACFP administrative data; estimates based on multivariate analysis of State-level economic and demographic data.

Projecting from the sample, about 56,000 child care homes that were participating in the CACFP in January 1997 were not participating 1 year later. This amounts to 29 percent of the nationwide total of 196,000 providers indicated in CACFP administrative records for January-March 1997. The figure corresponds closely to prior estimates of about 30 percent annual turnover in family child care homes.<sup>17</sup>

Among the former CACFP providers, 10 percent were still providing child care but not participating in the CACFP in 1999 when the survey was conducted (Exhibit 8). Although the vast majority of these providers cited low CACFP reimbursements among their reasons for leaving the program, many of the comments may not reflect an effect of tiering. In fact, one-third to one-half of the former providers apparently would have qualified for Tier 1 status (Zotov et al., E-FAN-02-004). These providers presumably decided that the CACFP reimbursement, even at the higher rate, was not worth the effort of meeting the program requirements for meal patterns, record keeping, training, and monitoring. The vast majority of the former providers who were still operating a child care business in 1999 were still licensed (87 percent), but compared with active CACFP homes, they tended to care for fewer children, operate for fewer hours per week, and serve fewer meals. The meals and snacks offered were roughly equal in nutritional value to the meals and snacks offered by active CACFP providers (Crepinsek et al., E-FAN-02-006). In short, it appears that some of the former providers dropped out of the CACFP because of tiering while others simply found that the program did not fit their situation. The relative size of these two groups cannot be determined from the available data.

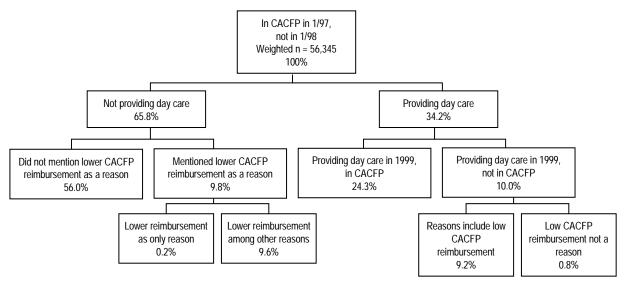
Most former providers did not just leave the CACFP, but left child care entirely. The vast majority of these departures seem to represent normal turnover, in which tiering played no major role. Nonetheless, about 10 percent of all former providers had left child care and said that low CACFP reimbursement was among their reasons for doing so (though virtually never the only reason). Some of these providers probably contributed to the observed reduction in the number of participating homes.

Tiering almost certainly had the additional effect of deterring some potential CACFP providers from enrolling. In fact, one would expect a program feature such as tiering to have a greater effect on potential enrollees than current participants because the latter group has already gotten past the "fixed costs" of participating, such as becoming licensed, finding a sponsor, and learning CACFP requirements and procedures. Two indirect pieces of evidence indicate the presence of a deterrent effect, although they do not allow estimates of the size of the effect:

• The total number of licensed or certified family child care homes increased in 1998 and 1999—the only time in the past decade that a rise in the number of licensed homes has not been accompanied by an increase in CACFP homes. (The pattern of growth in licensed homes is discussed further below.)

<sup>&</sup>lt;sup>17</sup> Kisker et al., 1991.

Exhibit 8
Status in 1999 of Former CACFP Child Care Homes



Source: Survey of former providers, 1999.

 Nearly half of all CACFP sponsors said they stepped up their recruitment activities after tiering was introduced, most commonly because they saw an increased difficulty of recruiting new homes.

## **Consequences for CACFP Attendance**

The decline in CACFP homes was not accompanied by a corresponding drop in the number of children receiving program benefits. Average daily attendance in CACFP homes changed very little from 1995 through 1999, according to program administrative data. While the number of homes shrank by 10 percent from 1996 to 1999, average daily attendance declined by just 2 percent. The national population of children under age 6 also decreased by 2 percent during this period.

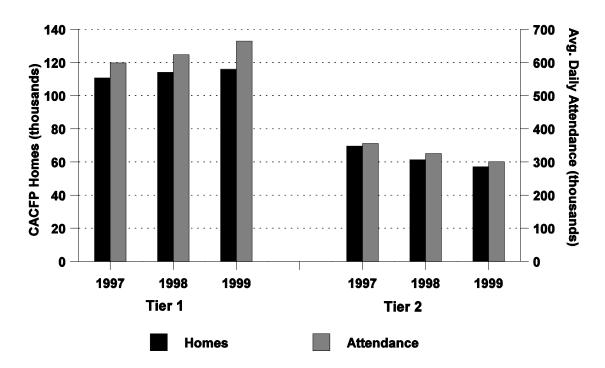
The small change in total attendance may be somewhat deceptive with respect to the effect of tiering because major changes were occurring in subgroups of the overall CACFP population. The number of low-income children served by CACFP homes increased by 80 percent from 1995 to 1999, while the number of higher income children declined by 23 percent, as described earlier. Thus the small overall decline results from a substantial growth of one subgroup of children balanced by substantial shrinkage of another.

These changes reflect the two theoretical incentives inherent in tiering's alteration of the CACFP reimbursement structure. First, tiering reduced the financial benefit of CACFP participation for Tier 2 providers. One would expect fewer such providers to participate.

Second, tiering did not alter the administrative cost reimbursement system for sponsors, which is tied to the number of homes sponsored. If a sponsoring organization were losing Tier 2 homes but desired to maintain a constant level of revenue and operations, it would have to recruit new homes. Tiering would not make it easier to recruit new Tier 1 homes, but it would presumably increase the difficulty of recruiting Tier 2 homes. Thus, sponsors would tend to maintain their operating level by replacing some Tier 2 homes with Tier 1 homes.

Consistent with these expectations, the number of Tier 1 homes and the number of children they serve has grown in the 2 years since tiering was introduced, while the numbers of Tier 2 homes and children have declined (Exhibit 9). Because no homes had a tier classification until tiering was introduced in July 1997, we cannot rule out the possibility that some compositional shift was occurring earlier and would have occurred in 1997-99 even without tiering. Nonetheless, the consistency of the theory and the empirical evidence make it reasonable to conclude that tiering's incentives reduced the number of Tier 2 homes and increased the number of Tier 1 homes.

Exhibit 9
CACFP Homes and Attendance by Reimbursement Tier,
Fourth Quarters of FY1997-99



Note: The fourth quarter of the fiscal year includes the months of July, August, and September. Source: CACFP administrative data.

Note that the figures in Exhibit 9 pertain to the fourth quarter of each fiscal year, while previous figures have referred to the average for the entire fiscal year. Comparing with the fourth quarter of 1997, the first quarter in which tiering was implemented, gives the longest available time period for examining the tier composition of homes and attendance.

As a result of this realignment, the number of higher income CACFP children declined and the number of low-income children grew. Low-income children made up 49 percent of all children in Tier 1 homes in 1999, compared with 15 percent in Tier 2 homes. Replacing Tier 2 homes with Tier 1 homes thus tends to increase the proportion of low-income children in the CACFP population.