table 20. For example, while there were about 800,000 farms with sales of $20,000 and more in 1974 (point A in fig. 6), the number of farms dropped to about 500,000 when the sales were expressed in 1969 dollars (point B in fig. 6).

The next step is to figure out the shifts in farm numbers for each sales class through this deflationary process. That is, to determine the numbers of farms that remain in the same sales class and those that move to the lower sales classes. For example, the 327,000 farms with sales of $10,000 to $19,999 in 1974 would have had sales ranging from $5,600 to $11,200 if they had not had an 80-percent increase in prices received due to inflation. In other words, the same 327,000 farms which are measured by the vertical distance CD for segment CA in the current dollar distribution, now can be measured by the vertical distance EF for segment EG in the 1969 constant dollar distribution (fig. 6).

It is clear that distance DH (60,900 farms) measures the number of farms with sales of $10,000 to $19,999 that remain in the same size class after the deflation, a difference between point H (853,600 farms) and point A (792,700 farms). In the meantime, distance CH or EI (265,400 farms) measures the number of farms that move to the lower sales class ($5,000 to $9,999), a difference between point C (1,118,900 farms) and point H. Thus, the 80-percent increase in prices received by farmers due to inflation is estimated to have moved 265,400 farms up statistically from the sales class of $5,000 to $9,999 to the next higher sales class ($10,000 to $19,999), a gain in the number of farms with sales of $10,000 to $19,999 (column 8 in table 16). Repeating the same deflationary process for farms in the next higher sales class ($20,000 to $39,999), we estimated that the price inflation moved 281,200 farms up from the sales class of $10,000 to $19,999 to the next higher sales class ($20,000 to $39,999), a loss in the number of farms with sales of $10,000 to $19,999 (column 9 in table 20). Therefore, the 80-percent increase in prices received by farmers due to inflation had the net effect of reducing the number of farms in the sales class of $10,000 to $19,999 by 15,800 farms. Table 20 shows that the number of farms in this sales class declined by 72,600 from 1969 to 1974. The preceding interpretation of that decline, however, tells us that about 22 percent of it (15,800 farms) was attributed to the price inflation and the remainder (56,800 farms) was due to other "real" factors.

Performing the same analysis for each sales class, we obtained a gain-loss array of the changes in farm numbers due to price inflation as shown in table 20. In general, price inflation has a net effect of reducing the number of small farms and increasing the number of large farms. As a result of an 80-percent increase in prices received by farmers between 1969 and 1974, about 90 percent of the apparent increase in the numbers of farms with sales of $100,000 and more is attributed to the effects of price inflation. Farms with sales of $100,000 and more increased by 98,500, but 88,200 of those were pushed into the higher sales classes because of the price inflation.

Projections

The Markov process, as employed in this study, enables projecting the future number of farms by acreage by multiplying the transition probability matrix by the row vector of farm numbers in the base year. The projection proceeds in two steps, however, when sales are used to measure the size of farms. First, a