The dairy farms of Eastern Ohio-Western Pennsylvania and the Lake Regions have the greatest diversification in livestock. Each has around one-seventh of the animal units in poultry and hogs. The Northeastern Dairy and the Northern Woods Regions have around one-fifteenth of the livestock classes as other livestock; poultry accounts for most of this. These two regions grow less corn and small grains and more hay than do the others. The northeastern dairymen do this as a matter of choice, finding it to their advantage to ship in the feed grains and raise more hay. Dairymen in the Northern Woods find their growing season and summer temperature best suited for growing hay. The dairymen of the Lake Region have more hogs and poultry than do the other regions. This is the only region of the dairy belt where raising pigs is a sizeable business venture.

Practically all dairy-farm operators hope to become owners and later to clear their farms of debt. This can be done only when there is a surplus from the farm income above that needed to pay farm expenses and meet the cost of family living. Differing ruleof-thumb procedures have been set up in the past to help prospective purchasers determine the possibility of paying-out once the farm is bought. One of the simplest of these, though not the most accurate, is to express the investment cost of the farm in terms of the yearly gross income. Table 19 shows some of these relationships for the dairy farms of the various regions of the Northern Dairy Belt in terms of the 1954 situation.

Table 19.—Number of Years Required for Gross Income to Equal Total Investment for Dairy Farms, for Major Dairy Regions: 1954

	Major dairy region				
Item	North- eastern (Subregions 1, 2, 6, 7, 8, 10)	Eastern Ohio- Wostern Pennsyl- vania (Subregions 17, 27, 28, 29, 30)	Central Michigan- New York Lake Shore (Subregions 9, 49, 50, 64)	Northern Lake (Subregions 65, 67, 68, 88)	Northern Woods (Subregion 66)
Number of farms	67, 521	40, 636	35, 605	124, 501	28, 001
Years required for gross income to equal investment in- Land and build- ings	1. 9 3. 2	2.8 4.3	3. 3 4. 7	2. 9 4. 6	3. 0 5. 1

The Central Michigan-Northern New York Lake Shore Region has the highest real estate value per farm. This area also shows the most years required for total incomes to equal real estate values. It compares favorably with the Northern Lake Region, however, in terms of ratio of income to total investment. The region with the largest number of years required for gross income to equal total investment is Economic Subregion 66 which has both the lowest real estate value and smallest total farm income.

Unusually small farms must necessarily have larger incomes in terms of real estate values if there is to be any surplus for payment of debt. The operators of small farms ordinarily have as many children as those who operate larger farms and their basic living costs are usually just as high. On the other hand, operators of the larger farms can pay-out with a smaller yearly income in terms of real estate values.

The trend throughout the whole Northern Dairy Belt is definitely toward fewer and bigger farms and larger herds. For example, there were only 130,000 farms in Wisconsin in 1954 with some milk cows in comparison with 143,000 in 1950. The size of herds during this 4-year period increased from 14 to 17. The same trend is found in Minnesota where the number of farms with milk cows decreased from 143,000 to 123,000 and the average number of cows per farm increased from 9 to 11. In New York, which may well be called the center of the eastern part of the dairy belt, the number of farms with milk cows dropped from 85,600 in 1950 to 71,800 in 1954 and the average number of cows per farm increased from 14 to 18. The trend toward fewer farms and more milk cows per farm may well continue.

Most dairy farms are not large when expressed in terms of dollars invested or in physical units. The 296,000 dairy farms in the Northern Dairy Regions show an average real estate value of approximately \$15,000 and a total estimated value of \$27,000 for land, buildings, machinery, and livestock. Their productive capacity in terms of harvested cropland, number of livestock or man-equivalent, also shows the average farm to be of modest size. If a dairy farmer averages \$100 to<sup>+</sup>al income per acre of harvested cropland he is doing well. Income larger than this indicates a farmer with crop production that is better-than-average or a highly productive herd, or an especially good market for milk.

## SIZE OF BUSINESS

Size of business is important because it affects the income available for family living and savings. A small volume of business, whether it be in dairying, other livestock, or crops, has only one advantage over larger units—losses are small. By the same token savings are also small.

Size may be measured in any of several ways. The acreage of land used for crop production, the number of milk cows on a dairy farm, or the capital invested in the business, are measures of size in different situations. Gross farm sales were used in the 1954 Census for grouping farms into economic classes. Six classes were established with gross farm incomes ranging from \$25,000 or more for Economic Class I to the smallest income group with \$250 to \$1,199, Economic Class VI.

Notable differences are shown among the five major dairy regions when grouped by economic class. The Northeastern Dairy Region has the fewest small farms in Economic Classes V and VI, being 12 and 3 percent, respectively. On the other hand, 53 percent of the farms in the Northern Woods Region are in the two smallest classes, while less than 2 percent are in the two largest classes. The number of farms of the three remaining major dairy regions are between these two extremes. They have more farms in the medium-sized groups, Economic Classes III and IV.