

**Table 3. Farm Equipment Items for Farms With Sales of \$2,500 and Over: 1950 to 1969**

	Year of census <sup>1</sup>				
	1969	1964	1959	1954	1950
Automobiles.....	X	X	X	X	X
Motor trucks including pickups.....	X	X	X	X	X
Tractors other than garden and motor tillers..	X	X	X	X	X
Wheel tractors other than garden tractors and motor tillers.....	X	X	X	X	X
Crawler tractors.....	X	X	X	X	X
Riding garden tractors 7 hp and over.....	X				
Grain and bean combines, self-propelled.....	X	X			
Cornpickers, corn heads, and picker-shellers..	X	X	X	<sup>2</sup> X	<sup>2</sup> X
Corn heads for combines.....	X				
Other cornpickers and picker-shellers.....	X				
Pickup balers.....	X	X	X	X	X
Windrowers, pull and self-propelled.....	X				
Field forage harvesters, shear bar.....	X	X			
Value of machinery and equipment.....	X				

<sup>1</sup>For 1959, 1954, and 1950 data are for the conterminous United States and are based on only a sample of farms.

<sup>2</sup>Data for 1954 and 1950 refer only to cornpickers.

### Comparability of Data

From 1964 to 1969, the number of farms decreased by about 428 thousand or 14 percent. Approximately 80 percent of the decrease was accounted for by farms with sales of less than \$2,500. The relatively large decrease in farms since 1964 has significantly affected the number of farms reporting various types of machinery and equipment.

Between 1964 and 1969, there was a sizable decrease in the proportion of farms reporting automobiles. Some of this decrease may be due to instructions on the census forms to report value of equipment (including automobiles) usually kept on this place and used for the farm business. The underreporting of automobiles kept mainly or wholly for nonfarm use is indicated by the data for nonresident farm operators. Of the approximately 460,000 nonresident operators, only one-half reported having an automobile, compared to three-fourths of all farm operators. Data for nonresident operators are presented in chapter 3.

A small decrease in the average number of automobiles per farm provides some indication that automobiles owned by members of the family or by hired workers living on the farm may not have been reported in the census. In previous censuses, enumerators usually reported all automobiles kept on the farm, since it was generally assumed that they had some farm use.

Other selected equipment items were subject to definitional reporting problems. For example, some farm operators may have included some pull-type grain or bean combines with self-propelled combines. Shearbar-type forage harvesters are difficult to define clearly. Among the manufacturers, various terminologies are used to describe the same type of equipment.

Some types of forage harvesters contain a combination of types of cutting or chopping systems. These types of reporting problems may have resulted in some overstatement of the census figures for these equipment items.

The data on the year of manufacture which were obtained in the 1969 Census of Agriculture appear to be subject to frequent reporting errors in the classification between the two age groups. A comparison of this data with statistics from other sources, along with a small research study matching 1969 census reports to 1964 census reports indicates that a sizable number of farm operators may have reported all of their selected items of machinery and equipment in the first reporting column of the equipment section, "manufactured 1965 or later," regardless of the actual year of manufacture.

This resulted in an overstatement of machinery and equipment manufactured in the period 1965 or later and an understatement of that manufactured in 1964 or earlier. The totals for machinery and equipment of all ages are not believed to be affected by the apparent age misclassification.

Table 4 provides a comparison of census data, by years of manufacture, with farm equipment data from the Current Industrial Reports.

The estimated market value of machinery and equipment as reported by farm operators was subject to the operator's interpretation of the question. The wide variations in the values reported indicate that, in place of market value, operators in some cases reported the replacement value; in other cases, they reported the depreciated value used for tax purposes; or yet in other cases, they reported an estimate of the value for only those items of equipment which had been listed on the report farm.

Only the most obvious errors in reported value were located and corrected by an imputation procedure during the computer edit process. For those census reports with an entry for some machinery or equipment, but for which a value was not reported, an estimated value of equipment was imputed. The value imputation was based on a census report for a farm with a similar type of operation and value-of-sales class.

## CHANGES IN FARM EQUIPMENT AND MACHINERY

### Automobiles

Since 1954, there has been a steady decline in both the number of farms reporting automobiles and in the number of automo-

**Table 4. Comparison of Selected Items of Machinery and Equipment**

	1969 Census of Agriculture				Current Industrial Reports—Number manufactured		Census reported equipment numbers as percentage of Current Industrial Report equipment numbers	
	Total		Manufactured 1965-69		1960-69	1965-69	1960-69	1965-69
	Farms	Number	Farms	Number				
Wheel tractors.....	1,527,318	3,581,426	696,472	1,146,199	1,536,865	896,511	233	137
Grain and bean combines, self-propelled.....	419,858	467,226	190,821	207,617	241,584	143,520	193	145
Corn heads <sup>1</sup> .....	176,625	184,032	111,021	114,880	154,357	99,020	119	116
Other cornpickers and picker-shellers <sup>1</sup> .....	389,513	403,785	117,949	121,091	178,739	67,015	226	181
Pickup balers.....	686,137	708,044	235,125	240,057	372,572	177,379	190	135
Windrowers, pull and self-propelled <sup>1</sup> .....	258,559	276,127	123,181	129,408	65,376	44,613	422	290
Field forage harvester, shear bar only <sup>1</sup> .....	202,609	214,637	90,839	94,464	144,249	83,597	149	113

<sup>1</sup>1969 Census of Agriculture data represent class 1-5 farms only.

Source: 1969 Census of Agriculture; Current Industrial Reports, Series M35A 1950-69, and Yearly Summaries 1960, 1961, and 1962.