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UNITED STATES DEPARTMENT OF AGRICULTURE

# The Farm Real Estate Situation

## 1942-43

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The high levels of sales and the continuing increase in prices of farm land, together with a recollection of developments during and after the last war, have stimulated a growing public interest in information and analyses of the current farm real estate market. This circular, the latest in a series on the farm real estate situation begun in 1926, presents basic data on wartime developments in the land market. Such data and accompanying analyses are of broad value as bases of decisions by individuals and financial and business organizations. In addition, such materials are essential to informed discussion and intelligent formulation of public policy with respect to emergency control in the farm-land market.

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## THE SITUATION IN GENERAL

Wartime developments in the farm real estate market were sharply accentuated during the year 1942-43.<sup>1</sup> Land values per acre for the country as a whole rose 9 percent and the volume of voluntary transfers continued high, with an unusually large number of sales reported during the winter months. The 1942-43 value rise of 9 percent was the largest of any year since 1920. This rate of increase is practically equal to the rates of 1917-18 and 1918-19. Significantly, it is exceeded only by the record rate of increase for 1919-20.

Values of land continued to rise during the succeeding 4 months and by July 1 had increased another 3 percent. The average rate of increase for the year ended in July was 1 percent a month, the highest rate of record aside from the boom year 1919-20. This increase brought values above their pre-World War I level for the first time since 1931.

On July 1, 1943, United States average land values were 40 percent above the 1933 low, 23 percent above a 1935-39 average, and 40 percent below the inflationary peak of 1920. Although the wartime increase has been general, the degree of rise has varied significantly among regions and States and within States.

The continuing high level of market activity and value increases were accompanied by a further sharp drop in foreclosures, rapid depletion or exhaustion of farm real estate holdings of credit agencies, generally increased asking prices, and a growing interest among nonfarmers as well as among farmers in opportunities to buy farm real estate.

In most parts of the country, the predominant forces operating in the land market stem from the condition of high farm-commodity prices, record levels of farm incomes, and a large accumulation of liquid funds of farmers and others.

March 1943 levels of farm-product prices were almost 16 percent above the average for 1942. Total cash income to farmers in 1943 is expected to be in excess of the estimated record 16.2 billion dollars for 1942. Demand deposits of country banks (Federal Reserve System members only) in 20 leading agricultural States more than doubled from March 1940 to March 1943; and more than three-fifths of the increase occurred in 1942. Further large increases have been reported since March.

For most farmers and for many residents of small towns in agricultural areas, land or loans on land constitute the only major type of

<sup>1</sup> The farm real estate year ordinarily covers roughly a 12-month period ending about March 1. Possession of farms by lease or sale is commonly given at that time and occupancy is usually considered as beginning on that date. Unless otherwise stated, the term "1942-43" in this circular denotes the 12-month period ended on or about March 1, 1943. Most of the real estate data used here refer to this period. The term "1942" here denotes the calendar year ended December 31, 1942.

The term "farm real estate" as used throughout this circular includes farm land, together with buildings and other permanent improvements. "Land values" here means "farm real estate values."

The land-market data presented here are collected chiefly in three types of surveys: (1) Estimates of average values of farm real estate, within relatively small communities, made by crop reporters of the United States Department of Agriculture. Formerly made once each year, in March, this survey is now done in July and November also, beginning with July 1942. Averages for crop-reporting districts are combined into State, regional, and national weighted averages. The weights are fixed on the basis of area of land in farms according to the 1925 census. Crop reporters likewise report as of March 15 each year on the number of transfers of farm real estate and in April with respect to cash rents. (2) Annual reports in March from farm real estate dealers, concerning values, types of buyers and sellers, and other market data. (3) Since 1941, quarterly field surveys (utilizing county records, interviews, and mail questionnaires) of developments in the farm real estate market in selected counties, by members of the regional staffs of the Bureau of Agricultural Economics, in collaboration with the State agricultural colleges in some States. During the first quarter of 1943, the sample was made up of 116 counties in 40 States.

The data from crop reporters are the primary basis for the indices of values and volume of sales, but these reports are checked against and supplemented by the results of the other surveys and by information from miscellaneous sources. Detailed statements concerning sources of data and methods of compilation may be found in U. S. Dept. Agr. Cir. 209, *The Farm Real Estate Situation, 1930-31*; and No. 15, *The Farm Real Estate Situation, 1926-27*.

investment, other than war bonds, seriously considered. The strong underlying propensity to acquire land for operation or investment has been increasingly implemented by growing funds of purchasing power. Some evidences of speculative activity have been reported.

An increasing number of farm-land purchases during the last year were wholly or to a large extent for cash. This development reflects the huge amounts of liquid purchasing power held by individuals in demand deposits. Moreover, the increase of purchases for cash has occurred in the face of extremely easy money conditions.

In practically all the better agricultural areas, and to a considerable extent elsewhere, there was keen competition among some classes of lenders to place farm-mortgage loans. In many parts of the country, an increased proportion of the loans for financing farm purchases were made by individuals and, in some areas, by local commercial banks.

Ratios of loans to sales prices have tended to decrease in most sections during 1942-43. However, the absolute amounts loaned on comparable farms has increased, for higher cash payments often have not been sufficient to offset increases in sales prices. Interest rates on farm-mortgage loans have continued at low levels, with rates of 4 percent or less often reported in the better farming areas.

In opposition to the value-stimulating forces were a number of bearish elements. These factors included fear of shortages of farm labor, machinery, equipment, and fertilizers, and transportation difficulties. In addition, income taxes and purchases of war bonds—with the prospect of an increasing flow of individual funds to Government—have probably dampened to some extent the demand for farms.

Further, many farmers and others are still acutely aware of the long-run disastrous results of the boom in farm real estate during and after World War I. Substantial recessions in farm-commodity prices sometime after the close of the present war would bring lower farm incomes, which would be incapable of sustaining an inflated level of land values.

Such considerations have led many persons to become increasingly concerned over recent and prospective developments in the land market. There has been an emerging apprehension that the "boom and collapse" pattern of the first World War and post-war periods might be repeated. Various measures for governmental control affecting the farm real estate market have been discussed and some proposals advanced. Among these are limitations on mortgage credit, taxing of speculative gains, taxing of transfers, and control of transfer by means of a permit system.<sup>2</sup>

## FARM REAL ESTATE VALUES

### RECENT MOVEMENTS OF UNITED STATES INDEX

During the 5-year period 1937-41, the United States index of farm real estate values (1912-14=100) moved from 85 to 84 and back to 85 (table 1).<sup>3</sup> Although offsetting movements within the country contributed to stability of the national index, it is nevertheless true that land values during this period were generally more stable than during any period of comparable length since the beginning of the century.

<sup>1</sup> A discussion of these types of measures is contained in a pamphlet by MURRAY, W. G. LAND BOOM CONTROLS. Wartime Farm and Food Policy Pam. 9, 34 pp., Ames, Iowa, 1943.

<sup>2</sup> Indexes of farm real estate values on a 1935-39 base are presented in table 16, p. 45.

TABLE 1.—Farm real estate: Index numbers of estimated value per acre, by geographic divisions and States, 1912-43<sup>1</sup>  
[1912-14=100]

| Division and State      | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | In-crease<br>1942<br>to<br>1943 |    |   |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------------------------|----|---|
| United States.....      | 97   | 100  | 103  | 103  | 108  | 117  | 129  | 140  | 170  | 157  | 139  | 135  | 130  | 127  | 124  | 119  | 117  | 116  | 115  | 106  | 89   | 73   | 76   | 79   | 82   | 85   | 85   | 84   | 84   | 85   | 91   | 99   |                                 |    |   |
| Geographic divisions:   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                 |    |   |
| New England:            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                 |    |   |
| Maine.....              | 99   | 101  | 100  | 99   | 102  | 112  | 117  | 123  | 140  | 135  | 134  | 130  | 128  | 127  | 128  | 127  | 127  | 126  | 127  | 126  | 116  | 105  | 104  | 104  | 105  | 107  | 106  | 105  | 106  | 107  | 109  | 112  | 3                               |    |   |
| Middle Atlantic.....    | 98   | 100  | 102  | 100  | 104  | 112  | 117  | 121  | 136  | 127  | 118  | 116  | 114  | 114  | 113  | 111  | 110  | 109  | 106  | 101  | 96   | 82   | 83   | 85   | 88   | 89   | 90   | 89   | 90   | 91   | 94   | 103  | 10                              |    |   |
| East North Central..... | 97   | 100  | 103  | 104  | 110  | 116  | 127  | 135  | 161  | 150  | 132  | 128  | 121  | 126  | 121  | 115  | 113  | 112  | 109  | 97   | 81   | 64   | 67   | 68   | 71   | 71   | 70   | 67   | 65   | 65   | 69   | 76   | 8                               |    |   |
| West North Central..... | 97   | 100  | 103  | 105  | 114  | 122  | 134  | 147  | 184  | 174  | 150  | 142  | 132  | 126  | 121  | 115  | 113  | 112  | 109  | 97   | 81   | 64   | 67   | 68   | 71   | 71   | 70   | 67   | 65   | 65   | 69   | 76   | 10                              |    |   |
| South Atlantic.....     | 98   | 100  | 103  | 98   | 108  | 119  | 135  | 161  | 198  | 174  | 146  | 152  | 151  | 148  | 149  | 137  | 134  | 132  | 128  | 116  | 96   | 80   | 87   | 93   | 97   | 104  | 106  | 107  | 110  | 117  | 127  |      | 9                               |    |   |
| East South Central..... | 97   | 100  | 103  | 99   | 109  | 120  | 140  | 162  | 199  | 163  | 149  | 142  | 141  | 139  | 133  | 130  | 129  | 128  | 117  | 97   | 79   | 85   | 83   | 96   | 102  | 107  | 109  | 112  | 115  | 126  | 141  |      | 12                              |    |   |
| West South Central..... | 96   | 100  | 104  | 100  | 103  | 116  | 134  | 143  | 177  | 159  | 136  | 132  | 136  | 144  | 144  | 139  | 137  | 136  | 136  | 121  | 97   | 82   | 88   | 91   | 94   | 96   | 99   | 97   | 99   | 105  | 112  |      | 7                               |    |   |
| Mountain.....           | 98   | 102  | 100  | 98   | 108  | 106  | 117  | 130  | 151  | 133  | 122  | 115  | 110  | 105  | 103  | 101  | 101  | 102  | 100  | 82   | 69   | 69   | 70   | 73   | 75   | 75   | 76   | 78   | 84   | 92   | 10   |      | 10                              |    |   |
| Pacific.....            | 94   | 99   | 106  | 107  | 111  | 122  | 129  | 134  | 156  | 155  | 151  | 148  | 147  | 145  | 144  | 143  | 142  | 142  | 142  | 140  | 118  | 96   | 97   | 101  | 105  | 110  | 109  | 107  | 108  | 109  | 115  | 126  |                                 | 10 |   |
| New England:            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                 |    |   |
| Maine.....              | 100  | 102  | 98   | 96   | 98   | 110  | 115  | 124  | 142  | 132  | 127  | 129  | 127  | 124  | 126  | 124  | 124  | 122  | 124  | 123  | 111  | 94   | 94   | 94   | 95   | 97   | 96   | 94   | 95   | 95   | 97   | 99   |                                 | 2  |   |
| New Hampshire.....      | 97   | 101  | 102  | 101  | 98   | 103  | 111  | 116  | 129  | 123  | 126  | 111  | 109  | 111  | 113  | 112  | 112  | 111  | 111  | 110  | 102  | 92   | 91   | 90   | 92   | 94   | 93   | 93   | 94   | 95   | 97   | 100  |                                 | 3  |   |
| Vermont.....            | 101  | 101  | 98   | 104  | 115  | 127  | 133  | 136  | 150  | 150  | 145  | 134  | 130  | 125  | 126  | 125  | 123  | 123  | 121  | 112  | 101  | 100  | 101  | 101  | 101  | 102  | 100  | 100  | 101  | 101  | 102  | 110  |                                 | 8  |   |
| Massachusetts.....      | 98   | 100  | 102  | 98   | 100  | 110  | 114  | 119  | 140  | 134  | 134  | 132  | 131  | 132  | 134  | 131  | 131  | 131  | 130  | 120  | 112  | 112  | 111  | 111  | 111  | 112  | 113  | 113  | 113  | 113  | 114  | 115  |                                 | 1  |   |
| Rhode Island.....       | 100  | 101  | 102  | 100  | 102  | 106  | 112  | 118  | 123  | 130  | 130  | 127  | 124  | 126  | 128  | 130  | 133  | 134  | 134  | 134  | 133  | 126  | 118  | 118  | 118  | 119  | 118  | 120  | 119  | 118  | 120  | 121  | 126                             |    | 1 |
| Connecticut.....        | 98   | 100  | 102  | 100  | 102  | 110  | 116  | 121  | 137  | 134  | 140  | 137  | 140  | 137  | 137  | 137  | 138  | 139  | 139  | 140  | 140  | 133  | 124  | 123  | 123  | 125  | 126  | 124  | 124  | 124  | 128  | 133  |                                 | 1  |   |
| Middle Atlantic:        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                 |    |   |
| New York.....           | 98   | 100  | 102  | 100  | 103  | 109  | 115  | 118  | 133  | 123  | 116  | 115  | 112  | 111  | 109  | 108  | 106  | 105  | 103  | 96   | 92   | 82   | 82   | 84   | 85   | 86   | 87   | 86   | 86   | 86   | 87   | 97   |                                 | 11 |   |
| New Jersey.....         | 98   | 100  | 102  | 100  | 102  | 111  | 115  | 119  | 130  | 130  | 121  | 115  | 120  | 124  | 129  | 128  | 127  | 127  | 125  | 123  | 118  | 110  | 111  | 111  | 111  | 113  | 115  | 116  | 116  | 121  | 128  | 136  |                                 | 6  |   |
| Pennsylvania.....       | 98   | 100  | 102  | 100  | 105  | 114  | 119  | 124  | 140  | 131  | 120  | 118  | 116  | 114  | 114  | 112  | 111  | 110  | 107  | 101  | 96   | 78   | 79   | 82   | 86   | 87   | 89   | 88   | 90   | 90   | 95   | 104  |                                 | 9  |   |
| East North Central:     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                 |    |   |
| Ohio.....               | 98   | 100  | 102  | 107  | 113  | 119  | 131  | 135  | 159  | 134  | 124  | 122  | 118  | 110  | 105  | 99   | 96   | 94   | 90   | 82   | 70   | 59   | 63   | 66   | 71   | 75   | 74   | 76   | 77   | 80   | 89   | 97   |                                 | 9  |   |
| Indiana.....            | 97   | 100  | 103  | 102  | 110  | 116  | 128  | 135  | 161  | 148  | 120  | 116  | 108  | 102  | 95   | 87   | 84   | 83   | 80   | 72   | 60   | 53   | 56   | 61   | 66   | 70   | 73   | 73   | 74   | 77   | 88   | 98   |                                 | 11 |   |
| Illinois.....           | 97   | 100  | 103  | 102  | 105  | 111  | 119  | 130  | 160  | 153  | 126  | 123  | 116  | 115  | 109  | 99   | 96   | 95   | 91   | 80   | 66   | 54   | 59   | 61   | 65   | 70   | 73   | 72   | 75   | 76   | 86   | 91   |                                 | 6  |   |
| Michigan.....           | 98   | 99   | 103  | 105  | 111  | 120  | 134  | 137  | 154  | 152  | 148  | 145  | 138  | 133  | 129  | 127  | 125  | 124  | 115  | 97   | 80   | 82   | 83   | 84   | 91   | 92   | 92   | 91   | 93   | 105  | 115  |      | 10                              |    |   |
| Wisconsin.....          | 97   | 100  | 103  | 104  | 117  | 124  | 133  | 143  | 171  | 168  | 154  | 147  | 139  | 130  | 125  | 122  | 120  | 119  | 117  | 104  | 91   | 80   | 80   | 80   | 82   | 84   | 89   | 88   | 86   | 84   | 82   | 88   |                                 | 5  |   |
| West North Central:     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                 |    |   |
| Minnesota.....          | 95   | 100  | 105  | 107  | 122  | 138  | 155  | 167  | 213  | 212  | 187  | 177  | 170  | 159  | 155  | 145  | 140  | 138  | 133  | 116  | 98   | 79   | 83   | 83   | 85   | 87   | 88   | 86   | 86   | 86   | 90   | 100  |                                 | 11 |   |
| Iowa.....               | 96   | 99   | 104  | 112  | 128  | 134  | 145  | 160  | 213  | 197  | 162  | 156  | 143  | 136  | 130  | 121  | 117  | 116  | 113  | 98   | 80   | 58   | 63   | 67   | 73   | 73   | 74   | 74   | 75   | 80   | 87   |      | 9                               |    |   |
| Missouri.....           | 97   | 100  | 103  | 102  | 108  | 115  | 125  | 137  | 166  | 163  | 137  | 137  | 136  | 131  | 124  | 109  | 96   | 95   | 92   | 79   | 67   | 55   | 57   | 58   | 60   | 60   | 60   | 58   | 59   | 60   | 66   | 74   |                                 | 12 |   |
| North Dakota.....       | 97   | 100  | 103  | 103  | 112  | 118  | 124  | 130  | 145  | 141  | 136  | 128  | 114  | 109  | 105  | 100  | 99   | 95   | 85   | 73   | 68   | 68   | 67   | 68   | 67   | 64   | 57   | 52   | 52   | 55   | 58   |      | 5                               |    |   |
| South Dakota.....       | 96   | 101  | 103  | 101  | 108  | 116  | 126  | 146  | 181  | 173  | 146  | 126  | 117  | 115  | 107  | 97   | 96   | 95   | 83   | 63   | 55   | 54   | 54   | 54   | 54   | 54   | 51   | 44   | 41   | 40   | 42   |      | 47                              |    |   |
| Nebraska.....           | 98   | 100  | 102  | 101  | 104  | 110  | 127  | 145  | 179  | 168  | 144  | 139  | 128  | 123  | 123  | 119  | 117  | 116  | 113  | 106  | 90   | 69   | 72   | 72   | 73   | 72   | 69   | 65   | 58   | 55   | 64   |      | 8                               |    |   |
| Kansas.....             | 101  | 99   | 99   | 103  | 109  | 115  | 122  | 132  | 151  | 149  | 130  | 127  | 118  | 115  | 113  | 113  | 113  | 113  | 113  | 103  | 89   | 70   | 72   | 73   | 75   | 78   | 78   | 76   | 71   | 71   | 74   |      | 14                              |    |   |

|                     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| South Atlantic:     | 100 | 101 | 99  | 100 | 105 | 115 | 124 | 129 | 139 | 129 | 119 | 119 | 107 | 112 | 114 | 111 | 111 | 111 | 111 | 107 | 95  | 80  | 80  | 82  | 84  | 87  | 89  | 89  | 93  | 96  | 108 | 12  |    |
| Delaware.....       | 97  | 100 | 103 | 104 | 109 | 118 | 129 | 136 | 166 | 146 | 141 | 136 | 133 | 131 | 130 | 126 | 124 | 123 | 123 | 120 | 106 | 90  | 90  | 91  | 94  | 98  | 101 | 100 | 105 | 111 | 124 | 12  |    |
| Maryland.....       | 97  | 100 | 103 | 97  | 117 | 125 | 142 | 167 | 189 | 180 | 157 | 170 | 162 | 154 | 148 | 138 | 137 | 136 | 134 | 117 | 99  | 88  | 91  | 97  | 103 | 110 | 112 | 110 | 115 | 118 | 131 | 11  |    |
| Virginia.....       | 97  | 100 | 103 | 101 | 104 | 112 | 122 | 135 | 154 | 141 | 125 | 127 | 125 | 120 | 116 | 109 | 108 | 105 | 108 | 98  | 81  | 74  | 78  | 82  | 82  | 84  | 85  | 85  | 89  | 90  | 99  | 10  |    |
| West Virginia.....  | 97  | 99  | 104 | 102 | 114 | 130 | 152 | 176 | 223 | 196 | 166 | 195 | 192 | 187 | 185 | 178 | 172 | 165 | 158 | 135 | 114 | 86  | 101 | 111 | 121 | 132 | 138 | 138 | 136 | 150 | 161 | 7   |    |
| North Carolina..... | 101 | 98  | 101 | 94  | 98  | 107 | 122 | 162 | 230 | 186 | 166 | 128 | 136 | 138 | 128 | 113 | 110 | 104 | 90  | 73  | 57  | 67  | 76  | 78  | 83  | 87  | 88  | 89  | 95  | 103 | 112 | 9   |    |
| South Carolina..... | 101 | 98  | 101 | 94  | 98  | 107 | 122 | 162 | 230 | 186 | 166 | 128 | 136 | 138 | 128 | 113 | 110 | 104 | 90  | 73  | 57  | 67  | 76  | 78  | 83  | 87  | 88  | 89  | 95  | 103 | 112 | 9   |    |
| Georgia.....        | 98  | 101 | 101 | 94  | 105 | 116 | 131 | 172 | 217 | 172 | 136 | 125 | 123 | 116 | 112 | 104 | 102 | 101 | 100 | 90  | 57  | 65  | 72  | 73  | 79  | 79  | 80  | 82  | 87  | 93  | 103 | 11  |    |
| Florida.....        | 96  | 99  | 105 | 97  | 103 | 109 | 126 | 143 | 178 | 176 | 157 | 155 | 163 | 172 | 223 | 183 | 176 | 174 | 172 | 166 | 141 | 121 | 126 | 127 | 134 | 132 | 131 | 133 | 134 | 140 | 150 | 7   |    |
| East South Central: | 97  | 100 | 103 | 100 | 111 | 127 | 146 | 170 | 200 | 172 | 151 | 147 | 141 | 140 | 139 | 134 | 130 | 129 | 127 | 115 | 97  | 80  | 81  | 87  | 89  | 98  | 103 | 107 | 113 | 114 | 129 | 147 | 14 |
| Kentucky.....       | 96  | 100 | 104 | 100 | 110 | 121 | 145 | 168 | 200 | 169 | 154 | 158 | 148 | 137 | 134 | 130 | 127 | 125 | 123 | 114 | 96  | 79  | 84  | 91  | 97  | 100 | 102 | 104 | 108 | 113 | 123 | 139 | 13 |
| Tennessee.....      | 98  | 103 | 103 | 98  | 103 | 128 | 143 | 177 | 147 | 135 | 143 | 143 | 144 | 154 | 145 | 143 | 143 | 143 | 143 | 129 | 102 | 88  | 99  | 110 | 114 | 116 | 123 | 122 | 125 | 129 | 139 | 13  |    |
| Alabama.....        | 97  | 102 | 102 | 97  | 111 | 121 | 131 | 155 | 218 | 150 | 148 | 143 | 134 | 136 | 134 | 126 | 123 | 122 | 122 | 112 | 92  | 73  | 82  | 90  | 92  | 97  | 106 | 106 | 111 | 122 | 133 | 139 | 8  |
| Mississippi.....    | 97  | 102 | 102 | 97  | 111 | 121 | 131 | 155 | 218 | 150 | 148 | 143 | 134 | 136 | 134 | 126 | 123 | 122 | 122 | 112 | 92  | 73  | 82  | 90  | 92  | 97  | 106 | 106 | 111 | 122 | 133 | 139 | 9  |
| West South Central: | 98  | 101 | 101 | 95  | 109 | 129 | 149 | 169 | 222 | 186 | 174 | 170 | 160 | 160 | 153 | 150 | 147 | 145 | 141 | 118 | 104 | 80  | 86  | 88  | 92  | 92  | 97  | 95  | 100 | 111 | 123 | 11  |    |
| Arkansas.....       | 98  | 102 | 99  | 95  | 106 | 112 | 143 | 157 | 198 | 163 | 140 | 144 | 137 | 141 | 143 | 135 | 132 | 132 | 132 | 121 | 103 | 89  | 96  | 103 | 104 | 108 | 117 | 117 | 121 | 121 | 129 | 145 | 12 |
| Louisiana.....      | 98  | 101 | 101 | 95  | 104 | 114 | 130 | 140 | 166 | 160 | 139 | 133 | 125 | 131 | 130 | 128 | 127 | 127 | 127 | 116 | 94  | 76  | 83  | 86  | 91  | 94  | 93  | 93  | 96  | 101 | 111 | 10  |    |
| Oklahoma.....       | 95  | 100 | 105 | 103 | 103 | 115 | 133 | 141 | 174 | 156 | 133 | 128 | 137 | 146 | 146 | 141 | 139 | 138 | 138 | 122 | 96  | 83  | 88  | 91  | 94  | 96  | 99  | 97  | 99  | 105 | 109 | 4   |    |
| Texas.....          | 95  | 100 | 105 | 103 | 103 | 115 | 133 | 141 | 174 | 156 | 133 | 128 | 137 | 146 | 146 | 141 | 139 | 138 | 138 | 122 | 96  | 83  | 88  | 91  | 94  | 96  | 99  | 97  | 99  | 105 | 109 | 4   |    |
| Mountain:           | 97  | 100 | 103 | 100 | 94  | 100 | 106 | 114 | 126 | 105 | 96  | 87  | 81  | 75  | 72  | 70  | 71  | 72  | 72  | 70  | 58  | 48  | 50  | 53  | 54  | 53  | 54  | 53  | 57  | 62  | 69  | 11  |    |
| Montana.....        | 100 | 101 | 99  | 96  | 99  | 114 | 130 | 146 | 172 | 162 | 136 | 133 | 129 | 123 | 119 | 117 | 116 | 116 | 116 | 96  | 76  | 77  | 80  | 83  | 86  | 85  | 85  | 86  | 87  | 94  | 106 | 13  |    |
| Idaho.....          | 97  | 103 | 100 | 103 | 94  | 97  | 121 | 147 | 176 | 146 | 134 | 121 | 112 | 100 | 95  | 94  | 95  | 96  | 98  | 95  | 77  | 62  | 62  | 62  | 65  | 66  | 66  | 68  | 71  | 78  | 88  | 13  |    |
| Wyoming.....        | 98  | 103 | 98  | 93  | 102 | 107 | 110 | 118 | 141 | 132 | 123 | 113 | 98  | 92  | 89  | 82  | 82  | 83  | 81  | 65  | 54  | 54  | 53  | 57  | 60  | 60  | 61  | 61  | 63  | 69  | 78  | 13  |    |
| Colorado.....       | 100 | 104 | 96  | 100 | 96  | 111 | 118 | 127 | 144 | 125 | 115 | 110 | 108 | 106 | 108 | 108 | 109 | 110 | 109 | 89  | 75  | 76  | 76  | 80  | 82  | 83  | 84  | 87  | 95  | 101 | 6   |     |    |
| New Mexico.....     | 95  | 100 | 105 | 97  | 95  | 105 | 125 | 140 | 165 | 148 | 135 | 124 | 128 | 121 | 125 | 123 | 123 | 123 | 104 | 90  | 90  | 91  | 94  | 96  | 95  | 94  | 95  | 96  | 102 | 110 | 8   |     |    |
| Arizona.....        | 100 | 102 | 98  | 98  | 104 | 117 | 122 | 144 | 167 | 137 | 133 | 133 | 131 | 130 | 129 | 128 | 127 | 127 | 126 | 122 | 98  | 83  | 84  | 87  | 90  | 89  | 89  | 89  | 93  | 100 | 8   |     |    |
| Utah.....           | 96  | 100 | 103 | 102 | 99  | 96  | 103 | 117 | 135 | 123 | 119 | 112 | 108 | 102 | 99  | 99  | 99  | 99  | 99  | 97  | 78  | 65  | 65  | 68  | 69  | 69  | 70  | 71  | 73  | 78  | 7   |     |    |
| Nevada.....         | 96  | 100 | 103 | 102 | 99  | 96  | 103 | 117 | 135 | 123 | 119 | 112 | 108 | 102 | 99  | 99  | 99  | 99  | 99  | 97  | 78  | 65  | 65  | 68  | 69  | 69  | 70  | 71  | 73  | 78  | 7   |     |    |
| Pacific:            | 98  | 100 | 103 | 100 | 102 | 112 | 118 | 122 | 140 | 132 | 124 | 117 | 115 | 113 | 112 | 111 | 110 | 110 | 103 | 91  | 74  | 73  | 76  | 80  | 84  | 84  | 83  | 84  | 91  | 101 | 11  |     |    |
| Washington.....     | 97  | 100 | 103 | 99  | 100 | 104 | 112 | 118 | 130 | 130 | 122 | 115 | 113 | 110 | 107 | 106 | 106 | 107 | 106 | 88  | 72  | 72  | 74  | 77  | 82  | 82  | 82  | 84  | 85  | 91  | 99  | 9   |    |
| Oregon.....         | 93  | 99  | 108 | 111 | 116 | 130 | 136 | 142 | 167 | 168 | 166 | 165 | 164 | 164 | 163 | 162 | 161 | 160 | 160 | 158 | 133 | 109 | 110 | 115 | 119 | 124 | 123 | 121 | 122 | 128 | 141 | 10  |    |
| California.....     | 93  | 99  | 108 | 111 | 116 | 130 | 136 | 142 | 167 | 168 | 166 | 165 | 164 | 164 | 163 | 162 | 161 | 160 | 160 | 158 | 133 | 109 | 110 | 115 | 119 | 124 | 123 | 121 | 122 | 128 | 141 | 10  |    |

1 All farm land with improvements as of Mar. 1. Owing to rounding of figures, 1912-14 will not always equal exactly 100 percent.

However, during 1940 and 1941 market activity and volume of sales increased sharply, without leading immediately to any significant general increase in market values. This sluggishness of response of values to a greatly increased demand is largely attributable to the overhanging supply of unwillingly held farms in the hands of creditor agencies and others. With the progressive depletion of such holdings and with increasing farm incomes sustaining demand for land, values rose rapidly in the latter part of 1941. By March 1, 1942, the national index was at 91, or 7 percent above the 85 mark of March 1941.

Little or no general price increase was reported during the spring and early summer of 1942, and the national index remained at 91 as of July 1. By November 1, however, a rise to 93 was recorded. Then, during the winter of 1942-43, under the stimulus of an unprecedented level of farm incomes and a huge volume of liquid funds in the hands of farmers and others, sales activity increased markedly in a number of regions and the United States index of value rose to 99. On an annual basis, the rate of increase during these 4 months was about 20 percent—almost equal to that of 1919-20.

From March 1 to July 1, 1943, a further rise of 3 percent in the United States index was recorded. The average rate of increase during the 12 months preceding July 1 was about 1 percent a month, the highest of record outside the boom year 1919-20.

### LAND-VALUE MOVEMENTS BY REGIONS AND STATES

Increases considerably larger than the average for the United States have been reported from several regions, States, and particular areas within States.

TABLE 2.—*Farm real estate: Index numbers of estimated value per acre, by geographic divisions, 1942-43, and percentage increases to July 1, 1943*

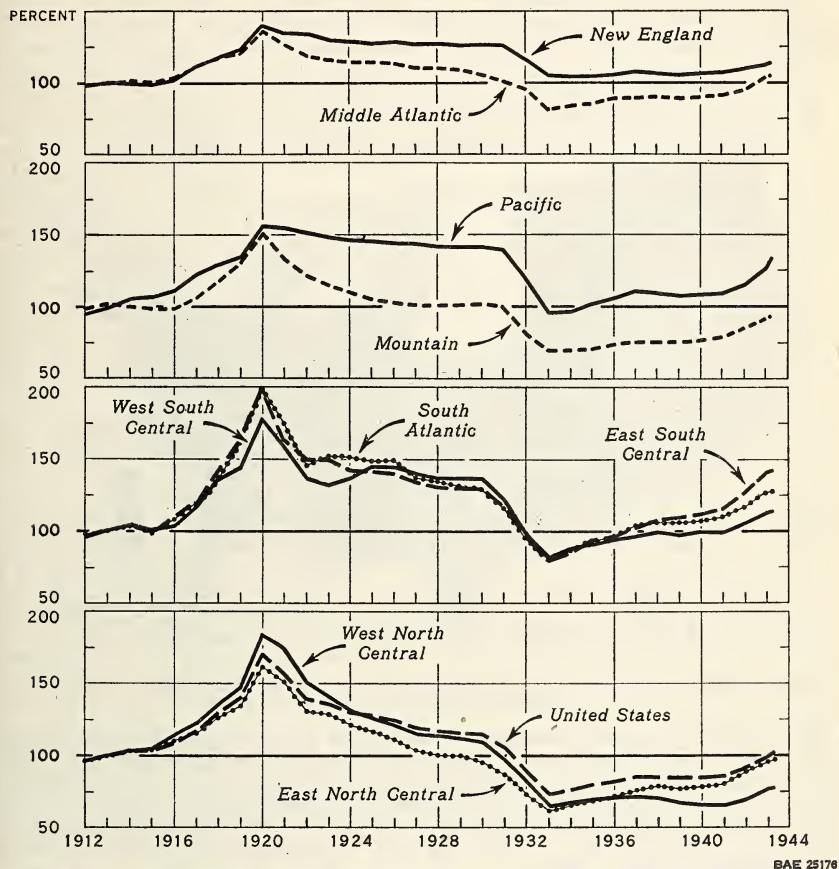
[1912-14=100]

| Geographic division     | 1942   |        |        | 1943   |        | Percentage increase          |                                 |
|-------------------------|--------|--------|--------|--------|--------|------------------------------|---------------------------------|
|                         | Mar. 1 | July 1 | Nov. 1 | Mar. 1 | July 1 | July 1, 1942 to July 1, 1943 | 1935-39 average to July 1, 1943 |
|                         |        |        |        |        |        | Percent                      | Percent                         |
| New England.....        | 109    | 109    | 109    | 112    | 114    | 5                            | 8                               |
| Middle Atlantic.....    | 94     | 94     | 95     | 103    | 105    | 12                           | 18                              |
| East North Central..... | 89     | 87     | 90     | 96     | 97     | 11                           | 31                              |
| West North Central..... | 69     | 68     | 70     | 76     | 77     | 13                           | 11                              |
| South Atlantic.....     | 117    | 117    | 121    | 127    | 128    | 9                            | 27                              |
| East South Central..... | 126    | 126    | 128    | 141    | 142    | 13                           | 40                              |
| West South Central..... | 105    | 104    | 105    | 112    | 114    | 10                           | 19                              |
| Mountain.....           | 84     | 86     | 89     | 92     | 94     | 9                            | 27                              |
| Pacific.....            | 115    | 119    | 120    | 126    | 134    | 13                           | 26                              |
| United States.....      | 91     | 91     | 93     | 99     | 102    | 12                           | 23                              |

The largest recent value increases among the nine geographic divisions have occurred in the East South Central States (table 2 and fig. 1), and within this group Kentucky and Tennessee have led the way (fig. 2). Measured from a 1935-39 average, land values in Kentucky increased more than 50 percent by March 1943 and little or no further

by July 1943. The corresponding rise for Tennessee was about 40 percent, and for the division as a whole also approximately 40 percent. Roughly two-thirds of the increases to March 1943 occurred during the immediately preceding 2 years and about one-third in the year 1942-43.

Among the value-stimulating factors in Kentucky and Tennessee has been the phenomenal increase in the price of burley tobacco.



BAE 25176

FIGURE 1.—FARM REAL ESTATE: ESTIMATED VALUE PER ACRE, BY GEOGRAPHIC DIVISIONS, MARCH 1, 1912-43 AND JULY 1, 1943

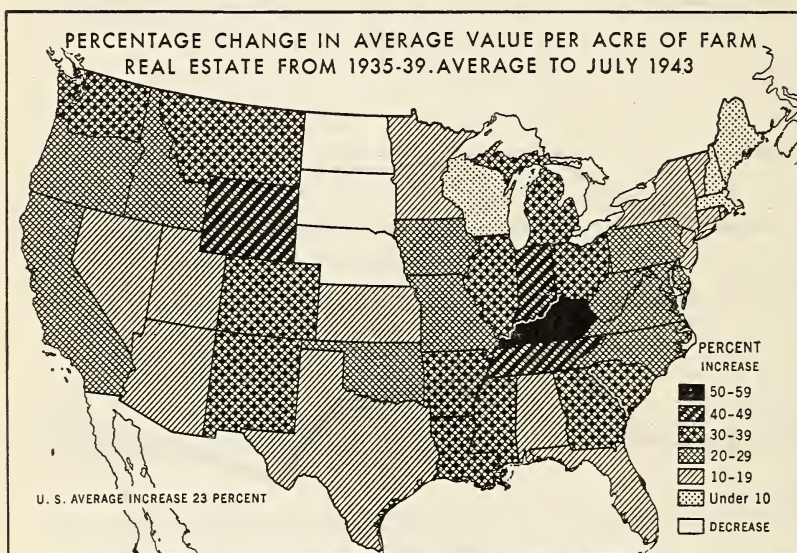
(1912-14=100)

Farm real estate values in all geographic divisions have increased markedly during the last 2 to 3 years. The largest relative increases in the 12 months ended July 1, 1943, occurred in the Pacific, West North Central, and East South Central divisions; the smallest was in New England.

The season average price per pound of this type of tobacco in Kentucky rose from 15.8 cents in 1940 to 42.0 cents in 1942. The average for the first half of the 1930 decade was 12.8 cents and for the last half 22.5 cents. Costs of production appear to have risen much less rapidly than price and income.

Increases in land values approaching those of Kentucky and Tennessee have been reported from the East North Central division, which contains the eastern Corn Belt. From a 1935-39 average, land values in Indiana rose 43 percent by March 1943 and somewhat more by July 1943. Ohio, Illinois, and Michigan recorded increases which were roughly two-thirds those of Indiana, but very much smaller rises occurred in Wisconsin.

An element contributing to the increases in land values in this region is the rise in prices of corn and hogs. By mid-May 1943, prices of corn were almost 60 percent above the 1935-39 average



BAE 4297

FIGURE 2.—PERCENTAGE CHANGE IN AVERAGE VALUE PER ACRE OF FARM REAL ESTATE FROM 1935-39 AVERAGE TO JULY 1943

The largest percentage increases in farm real estate values, measured from 1935-39 averages, have occurred in Kentucky, Indiana, Tennessee, and Wyoming. The upward movement was generally strong in the eastern Corn Belt, the Mississippi Delta, the eastern section of the Mountain States, and in South Carolina and Georgia. Although land-value levels in the Dakotas and Nebraska are still somewhat below 1935-39 averages, substantial increases have occurred in these States during the last 2 years.

and prices of hogs more than 65 percent above their 1935-39 average. The rise of production costs was much less than the price and income increases.

In the South Atlantic and Mountain regions land values in March 1943 were about 25 percent above their 1935-39 levels. Corresponding ratios for the Pacific, West South Central, and Middle Atlantic sections were 19, 18, and 17 percent, respectively. Substantial increases in Iowa and Missouri were partly offset by lower levels in North Dakota, South Dakota, and Nebraska, and consequently the rise for the West North Central group as a whole from the 1935-39 average to March 1943 was only 10 percent. Extensive lending-agency holdings in several States in this region have caused land values

to respond rather slowly to the increased current price and income levels. The New England increase was limited to 6 percent.

In seven divisions the 1942-43 increase approximated the national average of 9 percent, but in the East South Central States and New England the ratios were 12 and 3 percent. Although the United States index rose 3 percent from March 1 to July 1, considerably greater increases were reported from the Pacific Coast region and from several of the Mountain States. The Pacific division, led by California, recorded an increase of 6 percent. An equal percentage increase was reported from Montana and a rise of 5 percent from Wyoming. All other geographic division indices increased 1 to 2 percent (table 2).

In 6 of the 9 geographic divisions and in 33 of the 48 States, average land values on July 1, 1943, were equal to or above the levels of 1912-14. However, it should be emphasized that such comparisons of present values with levels of 30 years ago are often of limited significance in judging present levels, particularly if the 1912-14 levels are regarded as "normal." Complex economic developments during the last three decades have so altered the existing and prospective structures of prices of farm products, production costs, and incomes, that the pattern of land values also must inevitably be radically altered. A less objectionable rough benchmark with which to compare recent and present value levels is the average for 1935-39. During this relatively recent period land values had come to a kind of equilibrium level, or at least were highly stable. Of course, estimates of the future, not merely study of the past, are logically the best bases for judgments concerning levels of land values.

Large variations in value movements undoubtedly have occurred within individual States, and land-market developments in several areas of considerable market activity may be cited to illustrate conditions in certain local markets.

In Imperial County, Calif., where agriculture is highly commercialized, with emphasis on speculative market vegetable crops grown under irrigation, average prices per acre of farm land rose 81 percent between the first quarter of 1941 and the first quarter of 1943. The increase during 1942-43 was about 37 percent. The volume of recorded voluntary transfers in the first quarter of 1943 was 67 percent above that of the first quarter of 1942 and 122 percent above the level of the corresponding quarter in 1941. Much of the rise apparently was traceable to the assurance of a labor supply by importation of Mexican workers and to an improvement in irrigation-district finances; but a type of "boom psychology" apparently developed in the first months of 1943. Fifteen percent of the properties sold during the first quarter of 1943 had been held less than 2 years; and the total sales price of these properties increased 38 percent between transfers. Nonfarmers as a group bought about a third more land than they sold. Most of the nonfarmer buyers were from the Los Angeles area.

During the winter and spring of 1942-43, prices of land rose rapidly in the winter wheat areas of western Kansas, western Nebraska, and eastern Colorado. Wheat land in southwest Kansas that sold for \$2,500 to \$3,000 a quarter section in 1941, and \$3,200 to \$3,500 in 1942, brought \$4,000 to \$5,000 a quarter in the spring of 1943. In western Nebraska, the best-quality land was reported to be selling for \$50 an acre in March 1943, compared with \$30 to \$35 an acre a year earlier.

The best wheat land in the higher risk part of the winter wheat area is reported in many instances to have doubled in price during the winter and spring of 1942-43. In the western Corn Belt and the central parts of Kansas and Nebraska, there were reported during the first quarter of 1943 numerous cases of sales and offers to buy good-quality lands at prices much higher than anything previously reported. Average prices in actual sales do not reveal these developments, for there was a limited market supply of higher quality farm land.

In the South, lands in the better areas appear recently to have risen in price relatively much more than have lands in the less productive areas. The greater increases have occurred in parts of the Mississippi Delta and in the citrus and truck crop sections of Florida. In the Piedmont and Coastal Plain regions, where agriculture generally has been somewhat less prosperous, purchasers have been less willing to meet increased asking prices. However, the sharp increase in price of peanuts and the decrease in numbers of "unwilling" owners in the Coastal Plain may lead to a rising land market in this section.

## AGRICULTURAL PRICES, PRODUCTION, AND INCOME

Large wartime increases in prices, production and gross incomes, with less marked increases in production costs, have resulted in sharply increased farm incomes. These factors, operating differentially within the country, constitute the principal part (though by no means all) of the explanation for the marked rise of farm real estate values.

### FARM-COMMODITY PRICES AND PRODUCTION

The index of prices received by farmers (August 1909-July 1914=100) advanced from 146 in March 1942 to 182 in March 1943, an increase of 25 percent during the year (table 3). By June 1943 the index had reached 190. The average for 1942 was 157, as compared with 122 for 1941 and 98 for 1940. Measured from a 1935-39 average, the increase to March 1943 was 72 percent and to June 1943, 79 percent.

By far the greatest price increases during the year ended March 1943 occurred in truck crops, where prices considerably more than doubled, reaching a level 2½ times the 1935-39 average. Fruit prices rose by half during the year, chickens and eggs by a third, dairy products a fourth, meat animals a fifth, grains a sixth, and cotton and cottonseed a tenth. Prices of fruit, meat animals, and cotton and cottonseed were close to 190 percent of their 1935-39 averages; whereas grains, chickens and eggs, and dairy products were 148-160 percent of 1935-39 levels.

Stimulated by rapidly rising prices, agricultural production reached record levels in 1942. The index of total production was 12 percent above the 1941 level, 15 percent above 1940, and 27 percent above the 1935-39 base. The greatest increases from 1935-39 averages occurred in oil-bearing crops, grains and hay, and meat animals. Production of three oil-bearing crops (soybeans, peanuts, and flaxseed) was up 226 percent; food grains, 38 percent; feed grains and hay, 47 percent; and meat animals, 39 percent. Floods and unfavorable weather conditions were expected to reduce food-crop production about 9 percent in 1943, but increased production of livestock and livestock products is expected to offset the crop decrease, so that the 1943 total volume of agricultural food production would be about 5 percent above that of 1942.

TABLE 3.—*Index numbers of farm prices and wholesale prices, for specified years, and by months, January 1942 to July 1943*

| Year and month | Farm prices<br>(August 1909-July 1914=100) |        |             |              |                |                   |                        |            | Wholesale prices<br>(1910-14=100) |                                    |
|----------------|--------------------------------------------|--------|-------------|--------------|----------------|-------------------|------------------------|------------|-----------------------------------|------------------------------------|
|                | Grains                                     | Fruits | Truck crops | Meat animals | Dairy products | Chickens and eggs | Cotton and cotton seed | All groups | All commodities                   | Other than farm products and foods |
| 1910.....      | 104                                        | 101    | -----       | 103          | 99             | 104               | 113                    | 102        | 103                               | 104                                |
| 1915.....      | 120                                        | 82     | -----       | 104          | 103            | 101               | 77                     | 98         | 102                               | 101                                |
| 1920.....      | 232                                        | 191    | -----       | 174          | 198            | 223               | 248                    | 211        | 225                               | 239                                |
| 1925.....      | 157                                        | 172    | 153         | 141          | 153            | 163               | 177                    | 156        | 151                               | 152                                |
| 1930.....      | 100                                        | 162    | 140         | 134          | 137            | 129               | 102                    | 126        | 126                               | 126                                |
| 1931.....      | 63                                         | 98     | 117         | 92           | 108            | 100               | 63                     | 87         | 107                               | 111                                |
| 1932.....      | 44                                         | 82     | 102         | 63           | 83             | 82                | 47                     | 65         | 95                                | 104                                |
| 1933.....      | 62                                         | 74     | 105         | 60           | 82             | 75                | 64                     | 70         | 96                                | 105                                |
| 1934.....      | 93                                         | 100    | 103         | 68           | 95             | 89                | 99                     | 90         | 109                               | 116                                |
| 1935.....      | 103                                        | 91     | 125         | 117          | 108            | 117               | 101                    | 108        | 117                               | 115                                |
| 1936.....      | 108                                        | 100    | 111         | 119          | 119            | 115               | 100                    | 114        | 118                               | 118                                |
| 1937.....      | 126                                        | 122    | 123         | 132          | 124            | 111               | 95                     | 121        | 126                               | 126                                |
| 1938.....      | 74                                         | 73     | 101         | 114          | 109            | 108               | 70                     | 95         | 115                               | 121                                |
| 1939.....      | 72                                         | 77     | 105         | 110          | 104            | 94                | 73                     | 92         | 113                               | 120                                |
| 1940.....      | 85                                         | 79     | 114         | 108          | 113            | 96                | 81                     | 98         | 115                               | 123                                |
| 1941.....      | 96                                         | 92     | 144         | 144          | 131            | 122               | 113                    | 122        | 127                               | 132                                |
| 1942.....      | 119                                        | 125    | 199         | 189          | 152            | 151               | 155                    | 157        | 144                               | 141                                |
| 1942:          |                                            |        |             |              |                |                   |                        |            |                                   |                                    |
| January.....   | 119                                        | 102    | 204         | 164          | 148            | 147               | 143                    | 149        | 140                               | 140                                |
| February.....  | 121                                        | 98     | 161         | 173          | 147            | 135               | 150                    | 145        | 141                               | 141                                |
| March.....     | 122                                        | 111    | 136         | 180          | 144            | 130               | 151                    | 146        | 142                               | 141                                |
| April.....     | 120                                        | 118    | 158         | 190          | 142            | 131               | 158                    | 150        | 144                               | 142                                |
| May.....       | 120                                        | 131    | 152         | 189          | 143            | 134               | 159                    | 152        | 144                               | 142                                |
| June.....      | 116                                        | 148    | 169         | 191          | 141            | 137               | 153                    | 151        | 144                               | 142                                |
| July.....      | 115                                        | 131    | 200         | 193          | 144            | 145               | 155                    | 154        | 144                               | 142                                |
| August.....    | 115                                        | 126    | 256         | 200          | 151            | 156               | 151                    | 163        | 145                               | 142                                |
| September..... | 119                                        | 129    | 191         | 195          | 156            | 166               | 156                    | 163        | 145                               | 141                                |
| October.....   | 117                                        | 134    | 226         | 200          | 165            | 173               | 158                    | 169        | 146                               | 141                                |
| November.....  | 117                                        | 127    | 238         | 197          | 171            | 178               | 160                    | 169        | 146                               | 142                                |
| December.....  | 124                                        | 151    | 293         | 196          | 175            | 183               | 162                    | 178        | 147                               | 142                                |
| 1943:          |                                            |        |             |              |                |                   |                        |            |                                   |                                    |
| January.....   | 134                                        | 139    | 277         | 205          | 177            | 185               | 164                    | 182        | 149                               | 142                                |
| February.....  | 138                                        | 156    | 301         | 214          | 179            | 170               | 163                    | 178        | 150                               | 143                                |
| March.....     | 143                                        | 172    | 302         | 218          | 180            | 171               | 166                    | 182        | 151                               | 143                                |
| April.....     | 146                                        | 189    | 291         | 218          | 180            | 173               | 167                    | 185        | 151                               | 143                                |
| May.....       | 148                                        | 212    | 253         | 214          | 179            | 175               | 167                    | 187        | 152                               | 143                                |
| June.....      | 151                                        | 234    | 308         | 211          | 178            | 179               | 166                    | 190        | 152                               | 143                                |
| July.....      | 154                                        | 230    | 315         | 206          | 178            | 183               | 163                    | 188        | 151                               | 144                                |

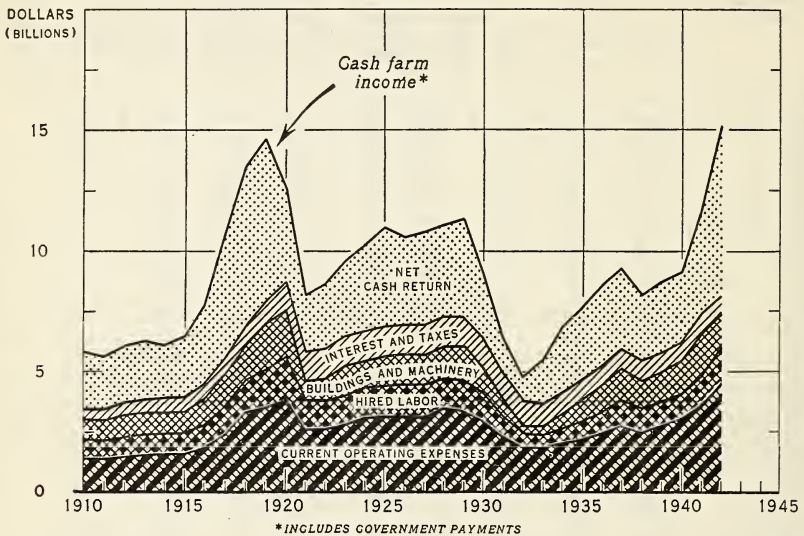
## FARM INCOME AND COSTS

As a result of record levels of production at high prices, both gross farm income and cash farm income also rose in 1942 to their highest recorded levels (table 4). Gross farm income was 36 percent above that of 1941, 73 percent above 1940, and 82 percent above the 1935-39 average. It was almost a billion dollars (5 percent) more than the earlier high mark of 1919.

Total cash farm income (from marketings and Government payments) in 1942 was 38 percent above the 1941 figure, 78 percent above 1940, 91 percent above the 1935-39 average, and 1½ billion dollars (11 percent) more than the earlier 1919 high (fig. 3).

Cash income from crop marketings in 1942 was up 37 percent from 1941, 87 percent from 1940, and 89 percent from the 1935-39 average, but was about 16 percent under the 1919 record level (table 5). Marketings of live stock and livestock products, however, brought in 30 percent more cash income than in 1919; this item was up 40 percent above 1941, 85 percent above 1940, and 98 percent above the 1935-39 average.

Income from hog marketings in 1942 was 69 percent above the 1941 amount and more than 2½ times the 1935-39 average. Marketings of poultry and eggs yielded 49 percent more than in 1941 and a little more than double the 1935-39 level. Cash income from tobacco was up 49 percent over 1941 and 76 percent over the 1935-39 average.



BAE 43209

FIGURE 3.—CASH FARM INCOME, PRODUCTION EXPENDITURES, MORTGAGE INTEREST AND TAXES, AND NET CASH RETURN, 1910-42.

Total cash farm income has increased during the war period much more than production expenditures, and net cash return in 1942 was almost three times that of 1940.

Grain and hay marketings brought in 36 percent more than in 1941 and 118 percent more than the average for 1935-39.

TABLE 4.—Gross and cash income from farm production, calendar years, 1910-42

| Year      | Cash income from marketings | Government payments | Total cash income | Value of home consumption | Gross income    | Year                    | Cash income from marketings | Government payments | Total cash income | Value of home consumption | Gross income    |
|-----------|-----------------------------|---------------------|-------------------|---------------------------|-----------------|-------------------------|-----------------------------|---------------------|-------------------|---------------------------|-----------------|
|           | Million dollars             | Million dollars     | Million dollars   | Million dollars           | Million dollars |                         | Million dollars             | Million dollars     | Million dollars   | Million dollars           | Million dollars |
| 1910..... | 5,793                       | -----               | 5,793             | 1,177                     | 6,970           | 1927.....               | 10,756                      | -----               | 10,756            | 1,695                     | 12,451          |
| 1911..... | 5,596                       | -----               | 5,596             | 1,092                     | 6,688           | 1928.....               | 11,072                      | -----               | 11,072            | 1,667                     | 12,739          |
| 1912..... | 6,017                       | -----               | 6,017             | 1,140                     | 7,157           | 1929.....               | 11,296                      | -----               | 11,296            | 1,699                     | 12,995          |
| 1913..... | 6,248                       | -----               | 6,248             | 1,153                     | 7,401           |                         |                             |                     |                   |                           |                 |
| 1914..... | 6,050                       | -----               | 6,050             | 1,161                     | 7,211           | 1930.....               | 9,021                       | -----               | 9,021             | 1,537                     | 10,558          |
| 1915..... | 6,403                       | -----               | 6,403             | 1,131                     | 7,534           | 1931.....               | 6,371                       | -----               | 6,371             | 1,253                     | 7,624           |
| 1916..... | 7,750                       | -----               | 7,750             | 1,309                     | 9,059           | 1932.....               | 4,743                       | -----               | 4,743             | 1,008                     | 5,751           |
| 1917..... | 10,746                      | -----               | 10,746            | 1,861                     | 12,607          | 1933.....               | 5,314                       | 131                 | 5,445             | 1,023                     | 6,468           |
| 1918..... | 13,461                      | -----               | 13,461            | 2,153                     | 15,614          | 1934.....               | 6,334                       | 446                 | 6,780             | 1,090                     | 7,870           |
| 1919..... | 14,602                      | -----               | 14,602            | 2,395                     | 16,997          | 1935.....               | 7,086                       | 573                 | 7,659             | 1,320                     | 8,979           |
|           |                             |                     |                   |                           |                 | 1936.....               | 8,367                       | 287                 | 8,654             | 1,374                     | 10,028          |
| 1920..... | 12,608                      | -----               | 12,608            | 2,406                     | 15,014          | 1937.....               | 8,850                       | 367                 | 9,217             | 1,410                     | 10,627          |
| 1921..... | 8,150                       | -----               | 8,150             | 1,568                     | 9,718           | 1938.....               | 7,686                       | 482                 | 8,168             | 1,283                     | 9,451           |
| 1922..... | 8,594                       | -----               | 8,594             | 1,555                     | 10,149          | 1939.....               | 7,877                       | 807                 | 8,684             | 1,244                     | 9,928           |
| 1923..... | 9,563                       | -----               | 9,563             | 1,623                     | 11,186          |                         |                             |                     |                   |                           |                 |
| 1924..... | 10,221                      | -----               | 10,221            | 1,622                     | 11,843          | 1940.....               | 8,340                       | 766                 | 9,106             | 1,232                     | 10,338          |
| 1925..... | 10,995                      | -----               | 10,995            | 1,781                     | 12,776          | 1941 <sup>1</sup> ..... | 11,157                      | 586                 | 11,743            | 1,399                     | 13,142          |
| 1926..... | 10,564                      | -----               | 10,564            | 1,837                     | 12,401          | 1942 <sup>1</sup> ..... | 15,480                      | 697                 | 16,177            | 1,691                     | 17,868          |

<sup>1</sup> Preliminary.

TABLE 5.—Cash income from farm marketings by groups of commodities, selected years, 1910-42

| Year                    | Crops            |                       |                  |                  |                  |                        | Livestock        |                   |                  |                  |                  |                            | Total crops and livestock |
|-------------------------|------------------|-----------------------|------------------|------------------|------------------|------------------------|------------------|-------------------|------------------|------------------|------------------|----------------------------|---------------------------|
|                         | Grains and hay   | Cotton and cottonseed | Fruits and nuts  | Vegetables       | Tobacco          | All crops <sup>1</sup> | Hogs             | Cattle and calves | Sheep and lambs  | Dairy products   | Poultry and eggs | All livestock <sup>1</sup> |                           |
|                         | <i>Mil. dol.</i> | <i>Mil. dol.</i>      | <i>Mil. dol.</i> | <i>Mil. dol.</i> | <i>Mil. dol.</i> | <i>Mil. dol.</i>       | <i>Mil. dol.</i> | <i>Mil. dol.</i>  | <i>Mil. dol.</i> | <i>Mil. dol.</i> | <i>Mil. dol.</i> | <i>Mil. dol.</i>           | <i>Mil. dol.</i>          |
| 1910.....               | 1,177            | 880                   | 232              | 291              | 102              | 2,950                  | 670              | 851               | 105              | 597              | 480              | 2,843                      | 5,793                     |
| 1915.....               | 1,485            | 830                   | 282              | 306              | 93               | 3,280                  | 691              | 966               | 111              | 685              | 499              | 3,123                      | 6,403                     |
| 1916.....               | 1,673            | 1,148                 | 314              | 436              | 139              | 4,043                  | 949              | 1,132             | 127              | 764              | 554              | 3,707                      | 7,750                     |
| 1917.....               | 2,312            | 1,604                 | 383              | 691              | 241              | 5,660                  | 1,299            | 1,651             | 159              | 1,029            | 740              | 5,086                      | 10,746                    |
| 1918.....               | 3,235            | 1,785                 | 488              | 617              | 343              | 6,985                  | 1,866            | 2,029             | 196              | 1,250            | 872              | 6,476                      | 13,461                    |
| 1919.....               | 3,015            | 2,282                 | 642              | 619              | 500              | 7,674                  | 1,911            | 1,921             | 214              | 1,522            | 1,111            | 6,928                      | 14,602                    |
| 1920.....               | 2,831            | 1,476                 | 677              | 744              | 295              | 6,654                  | 1,385            | 1,528             | 166              | 1,529            | 1,155            | 5,954                      | 12,608                    |
| 1925.....               | 1,776            | 1,762                 | 589              | 684              | 260              | 5,526                  | 1,318            | 1,252             | 207              | 1,515            | 1,038            | 5,469                      | 10,995                    |
| 1926.....               | 1,637            | 1,222                 | 607              | 731              | 240              | 4,889                  | 1,407            | 1,271             | 205              | 1,566            | 1,093            | 5,675                      | 10,564                    |
| 1927.....               | 1,721            | 1,500                 | 590              | 664              | 246              | 5,157                  | 1,237            | 1,336             | 197              | 1,685            | 1,017            | 5,599                      | 10,756                    |
| 1928.....               | 1,670            | 1,453                 | 621              | 629              | 247              | 5,044                  | 1,218            | 1,556             | 221              | 1,756            | 1,121            | 6,028                      | 11,072                    |
| 1929.....               | 1,581            | 1,512                 | 620              | 710              | 279              | 5,125                  | 1,297            | 1,495             | 224              | 1,838            | 1,181            | 6,171                      | 11,296                    |
| 1930.....               | 1,124            | 824                   | 561              | 685              | 244              | 3,839                  | 1,136            | 1,184             | 161              | 1,607            | 998              | 5,181                      | 9,020                     |
| 1931.....               | 635              | 497                   | 457              | 488              | 157              | 2,536                  | 774              | 838               | 130              | 1,277            | 746              | 3,835                      | 6,371                     |
| 1932.....               | 486              | 461                   | 327              | 358              | 115              | 1,997                  | 445              | 621               | 93               | 986              | 558              | 2,746                      | 4,743                     |
| 1933.....               | 671              | 577                   | 346              | 446              | 157              | 2,473                  | 524              | 600               | 104              | 1,004            | 514              | 2,841                      | 5,314                     |
| 1934.....               | 733              | 863                   | 394              | 498              | 236              | 3,004                  | 521              | 815               | 131              | 1,146            | 614              | 3,330                      | 6,334                     |
| 1935.....               | 769              | 712                   | 443              | 502              | 242              | 2,978                  | 682              | 1,062             | 152              | 1,310            | 799              | 4,108                      | 7,086                     |
| 1936.....               | 1,023            | 905                   | 462              | 656              | 243              | 3,651                  | 991              | 1,114             | 165              | 1,478            | 828              | 4,715                      | 8,366                     |
| 1937.....               | 1,176            | 883                   | 546              | 648              | 321              | 3,948                  | 925              | 1,239             | 186              | 1,525            | 862              | 4,902                      | 8,850                     |
| 1938.....               | 954              | 647                   | 405              | 533              | 294              | 3,190                  | 870              | 1,162             | 157              | 1,388            | 802              | 4,496                      | 7,686                     |
| 1939.....               | 1,064            | 627                   | 443              | 559              | 271              | 3,366                  | 810              | 1,290             | 172              | 1,346            | 767              | 4,511                      | 7,877                     |
| 1940.....               | 1,178            | 647                   | 442              | 591              | 241              | 3,470                  | 836              | 1,381             | 180              | 1,516            | 806              | 4,870                      | 8,340                     |
| 1941 <sup>2</sup> ..... | 1,591            | 1,048                 | 611              | 719              | 325              | 4,718                  | 1,302            | 1,718             | 227              | 1,897            | 1,107            | 6,439                      | 11,157                    |
| 1942 <sup>2</sup> ..... | 2,169            | 1,459                 | 813              | 1,029            | 483              | 6,484                  | 2,198            | 2,305             | 308              | 2,332            | 1,648            | 8,996                      | 15,480                    |

<sup>1</sup> Totals include income from other sources.<sup>2</sup> Preliminary.

Although total farm income rose to record levels in 1942, expenditures for production increased much less (fig. 3). The  $4\frac{3}{4}$  billion-dollar increase in total cash farm income (38 percent) from 1941 to 1942 was associated with a net increase of only four-fifths of a billion dollars (11 percent) in production expenditures, taxes, and interest. Somewhat larger increases in current operating expenses and wages paid to hired labor were partially offset by a substantial decrease, from the very high 1941 level, in expenditures on buildings and machinery.

Production expenditures, taxes, and interest in 1942 amounted to 50 percent more than the 1935-39 average, whereas total cash income was up 91 percent. Although current operating expenses and wages of hired labor increased 74 percent, expenditures on buildings and machinery were up only 18 percent, taxes were virtually the same, and mortgage interest 11 percent less.

As a result, net cash return<sup>4</sup> increased more than  $3\frac{1}{2}$  billion dollars (83 percent) from 1941 to 1942. The increase from the average of 1935-39 was almost 5 billion dollars, or 162 percent. Recent movements of cash income, production expenditures, and net cash return reveal a pattern strikingly similar to that of the World War I period. The levels of the series, however, have been higher during the present war period than during corresponding years of World War I.

A major element in an explanation of the recently widening margin between cash farm costs and total cash farm income is that prices paid

<sup>4</sup> "Net cash return" is total cash farm income *minus* current operating expenses, wages of hired labor, expenditures on buildings and machinery, and farm-mortgage interest and property taxes.

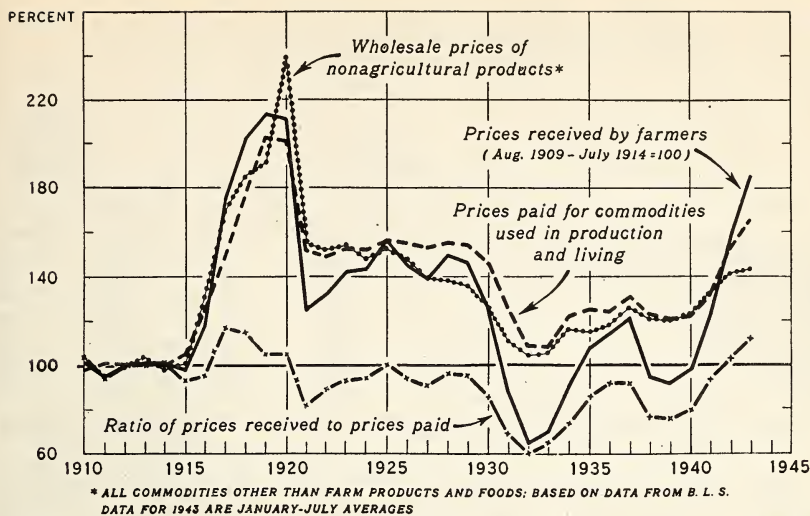
by farmers, have risen less than have prices received by farmers (fig. 4). Prices paid by farmers for commodities used in production rose, from a 1935-39 average, by only 20 percent to December 1942, whereas prices received rose by 68 percent (table 6). In June 1943, prices paid were 28 percent, and prices received 79 percent, above their 1935-39 averages. The ratio of prices received to prices paid, related to 1910-14 averages, was 114 in June 1943; related to 1935-39 averages, the ratio was 134.

TABLE 6.—Index numbers of prices paid by farmers, farm wage rates, interest, and taxes, and ratio of prices received to prices paid, selected years and months, 1910-43

[1910-14=100]

| Year           | Prices paid for commodities used in— |        |                       | Farm wage rates | Interest payable per acre | Taxes payable per acre | Prices paid including interest and taxes | Prices received | Ratio of prices received to prices paid |                              |
|----------------|--------------------------------------|--------|-----------------------|-----------------|---------------------------|------------------------|------------------------------------------|-----------------|-----------------------------------------|------------------------------|
|                | Production                           | Living | Production and living |                 |                           |                        |                                          |                 | Including interest and taxes            | Excluding interest and taxes |
| 1910.....      | 98                                   | 98     | 98                    | 97              | 83                        | 90                     | 96                                       | 102             | 106                                     | 104                          |
| 1915.....      | 104                                  | 107    | 105                   | 102             | 122                       | 118                    | 107                                      | 98              | 92                                      | 93                           |
| 1920.....      | 174                                  | 222    | 201                   | 242             | 217                       | 200                    | 202                                      | 211             | 104                                     | 105                          |
| 1925.....      | 147                                  | 163    | 156                   | 176             | 236                       | 265                    | 169                                      | 156             | 92                                      | 100                          |
| 1930.....      | 141                                  | 150    | 146                   | 167             | 207                       | 281                    | 160                                      | 126             | 79                                      | 86                           |
| 1931.....      | 123                                  | 128    | 126                   | 130             | 199                       | 277                    | 142                                      | 87              | 61                                      | 69                           |
| 1932.....      | 109                                  | 108    | 108                   | 96              | 188                       | 254                    | 124                                      | 65              | 52                                      | 60                           |
| 1933.....      | 108                                  | 108    | 108                   | 85              | 168                       | 220                    | 120                                      | 70              | 58                                      | 65                           |
| 1934.....      | 123                                  | 122    | 122                   | 95              | 153                       | 188                    | 129                                      | 90              | 70                                      | 74                           |
| 1935.....      | 127                                  | 124    | 125                   | 103             | 140                       | 178                    | 130                                      | 108             | 83                                      | 86                           |
| 1936.....      | 125                                  | 123    | 124                   | 111             | 131                       | 180                    | 128                                      | 114             | 89                                      | 92                           |
| 1937.....      | 136                                  | 128    | 131                   | 126             | 126                       | 181                    | 134                                      | 121             | 90                                      | 92                           |
| 1938.....      | 125                                  | 122    | 123                   | 125             | 121                       | 186                    | 127                                      | 95              | 75                                      | 77                           |
| 1939.....      | 122                                  | 120    | 121                   | 123             | 119                       | 183                    | 125                                      | 92              | 74                                      | 76                           |
| 1940.....      | 124                                  | 121    | 122                   | 126             | 117                       | 186                    | 126                                      | 98              | 78                                      | 80                           |
| 1941.....      | 131                                  | 131    | 131                   | 154             | 115                       | 183                    | 133                                      | 122             | 92                                      | 93                           |
| 1942.....      | 149                                  | 154    | 152                   | 201             | 113                       | 183                    | 151                                      | 157             | 104                                     | 103                          |
| 1942:          |                                      |        |                       |                 |                           |                        |                                          |                 |                                         |                              |
| January.....   | 145                                  | 146    | 145                   | 166             | -----                     | -----                  | 145                                      | 149             | 103                                     | 102                          |
| February.....  | 147                                  | 147    | 147                   | -----           | -----                     | -----                  | 147                                      | 145             | 99                                      | 99                           |
| March.....     | 149                                  | 150    | 150                   | 167             | -----                     | -----                  | 150                                      | 146             | 97                                      | 97                           |
| April.....     | 149                                  | 152    | 151                   | 177             | -----                     | -----                  | 150                                      | 150             | 100                                     | 99                           |
| May.....       | 150                                  | 153    | 152                   | -----           | -----                     | -----                  | 151                                      | 152             | 101                                     | 100                          |
| June.....      | 150                                  | 154    | 152                   | 183             | -----                     | -----                  | 151                                      | 151             | 100                                     | 99                           |
| July.....      | 150                                  | 155    | 153                   | 202             | -----                     | -----                  | 152                                      | 154             | 101                                     | 101                          |
| August.....    | 150                                  | 155    | 153                   | -----           | -----                     | -----                  | 152                                      | 163             | 107                                     | 107                          |
| September..... | 151                                  | 157    | 154                   | -----           | -----                     | -----                  | 153                                      | 163             | 107                                     | 106                          |
| October.....   | 151                                  | 158    | 155                   | 220             | -----                     | -----                  | 154                                      | 169             | 110                                     | 109                          |
| November.....  | 151                                  | 160    | 156                   | -----           | -----                     | -----                  | 157                                      | 169             | 109                                     | 108                          |
| December.....  | 153                                  | 162    | 158                   | -----           | -----                     | -----                  | 156                                      | 178             | 114                                     | 113                          |
| 1943:          |                                      |        |                       |                 |                           |                        |                                          |                 |                                         |                              |
| January.....   | 155                                  | 163    | 160                   | 223             | -----                     | -----                  | 157                                      | 182             | 116                                     | 114                          |
| February.....  | 157                                  | 165    | 162                   | -----           | -----                     | -----                  | 159                                      | 178             | 112                                     | 110                          |
| March.....     | 158                                  | 167    | 163                   | -----           | -----                     | -----                  | 160                                      | 182             | 114                                     | 112                          |
| April.....     | 161                                  | 168    | 165                   | 239             | -----                     | -----                  | 162                                      | 185             | 114                                     | 112                          |
| May.....       | 162                                  | 170    | 167                   | -----           | -----                     | -----                  | 163                                      | 187             | 115                                     | 113                          |
| June.....      | 163                                  | 171    | 168                   | 251             | -----                     | -----                  | 164                                      | 190             | 116                                     | 114                          |
| July.....      | 164                                  | 172    | 169                   | -----           | -----                     | -----                  | 165                                      | 188             | 114                                     | 111                          |

Much of the large cash return has been used for debt payment and purchase of war bonds. But other major parts have been used for purchase of land or have been kept in liquid form as is indicated by the record high levels of deposits in country banks. Demand deposits in Federal Reserve member banks in places under 15,000 population in 20 leading agricultural States rose from a 1935-39 March average of about 1½ billion dollars to more than 4 billions in March 1943. In the year ended in March 1943, these deposits rose almost 1½ billion dollars, or more than 50 percent. Such accumulations of liquid funds continue to be a factor of important current and potential influence on the farm real estate market.



BAE 43208

FIGURE 4.—PRICES RECEIVED AND PAID BY FARMERS AND RATIO, AND WHOLESALE PRICES OF NONAGRICULTURAL PRODUCTS, UNITED STATES, 1910-43.

(1910-14=100)

Prices received by farmers have increased during the war much more than have prices paid, and the ratio of prices received to prices paid (related to pre-World War I averages) in 1942 rose above 100 for the first time since 1929.

## INCOME-VALUE AND RENT-VALUE COMPARISONS

During periods of rapid price change, land values tend to follow rather than to anticipate major income trends. Farm income and rents in the World War I period advanced more rapidly and reached considerably higher relative levels than did land values. This general pattern apparently is again being repeated, with an even slower response of values to income and rent increases.

### FARM INCOMES AND FARM REAL ESTATE VALUES

For purposes of comparing increases in farm income and farm real estate values, the period 1937-39 has been selected as the recent base comparable with the 1912-14 pre-World War I base.

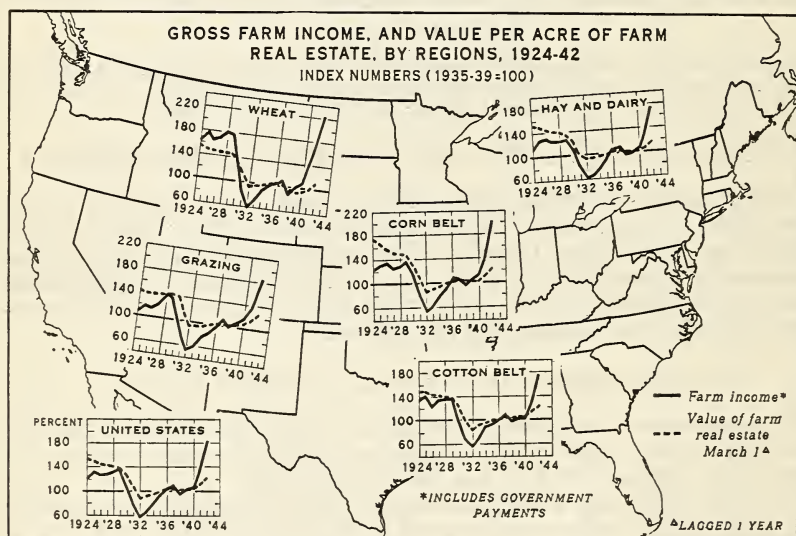
For the country as a whole, the increase in total cash income per acre from 1937-39 to 1942 was 86 percent (table 7) and in net cash return 170 percent, as compared with an increase in land values of 17 percent to March 1943 and 20 percent to July 1943. Although average values were considerably lower just before the present war than they were before the last war, they have responded, so far, less rapidly to income increases. From 1912-14 to March 1918, values increased 29 percent, whereas total cash income rose 70 percent and net cash return 120 percent by 1917. For every dollar increase in total cash income per acre, 1912-14 to 1917, land values increased \$3.57 by March 1918. The corresponding figure 1937-39 to 1942 and March 1943 is \$1.23. For every dollar increase in net cash return per acre, 1912-14 to 1917, land values increased \$5.78 by March 1918; and the corresponding figure, 1937-39 to 1942 and March 1943 is \$1.83.

TABLE 7.—Selected comparisons of increases in land values and cash farm incomes, by geographic divisions, 1912-14 to 1918 and 1937-39 to 1943

| Geographic division     | Increase in value per acre |             |           | Increase in total cash income per acre, 1937-39 to 1942 |
|-------------------------|----------------------------|-------------|-----------|---------------------------------------------------------|
|                         | 1912-14 to March 1918      | 1937-39 to— |           |                                                         |
|                         |                            | March 1943  | July 1943 |                                                         |
|                         | Percent                    | Percent     | Percent   | Percent                                                 |
| United States.....      | 29                         | 17          | 20        | 186                                                     |
| New England.....        | 17                         | 6           | 8         | 55                                                      |
| Middle Atlantic.....    | 17                         | 15          | 17        | 59                                                      |
| East North Central..... | 27                         | 24          | 26        | 89                                                      |
| West North Central..... | 34                         | 9           | 11        | 115                                                     |
| South Atlantic.....     | 35                         | 21          | 22        | 74                                                      |
| East South Central..... | 40                         | 33          | 34        | 78                                                      |
| West South Central..... | 34                         | 15          | 17        | 83                                                      |
| Mountain.....           | 17                         | 22          | 25        | 80                                                      |
| Pacific.....            | 29                         | 16          | 23        | 81                                                      |

<sup>1</sup> The corresponding increase from a 1912-14 base to 1917 was 70 percent. Data are not available for estimating changes by geographic divisions during this period.

Land values have been relatively much more responsive to income increases in some parts of the country than in other parts during the last several years. These variations in response probably are attribu-



BAE 38597

FIGURE 5.—GROSS FARM INCOME, AND VALUE PER ACRE OF FARM REAL ESTATE BY REGIONS, 1924-42.

Relative increases in gross farm income since 1940 have been much greater than corresponding increases in farm real estate values, in each of the major crop regions. High income levels are not expected to be permanent and consequently capitalization is largely on the basis of a return to lower incomes.

table to a considerable number of diverse factors: the nature of the adjustments of values in the base period to current and expected income levels, differences in the extent to which increases in farm income accrue to farm real estate as against other agents of production, differences in outlook and expectations concerning farm incomes, differ-

ences in amounts of unwillingly held lands pressing on the market, and many other circumstances. It would be difficult to isolate the separate effects of such influences. In the Mountain States values went up (1937-39 to March 1943) \$3.70 for each dollar of increase in cash income (1937-39 to 1942); in New England the corresponding rise was only 29 cents. Relative increases in the other geographic divisions were arrayed between these extremes. The West North Central figure was 48 cents; Middle Atlantic, 77 cents; South Atlantic, \$1.06; West South Central, \$1.30; East North Central, \$1.32; East South Central, \$1.77; and Pacific, \$1.79. In view of their limitations, these ratios may be regarded only as rough indicators of the broad regions in which the greatest and least relative responses of land values to income increases have occurred, and of the variations in the size of income increases that may stimulate further value rises. But a high ratio should not be interpreted to mean that an excessive value increase has necessarily occurred; nor should a low ratio be taken to mean that land values necessarily are low.

TABLE 8.—*Index numbers of gross farm income and value per acre of farm real estate, by regions, 1924-43*<sup>1</sup>

[1935-39=100]

| Region                         | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933  |
|--------------------------------|------|------|------|------|------|------|------|------|------|-------|
| Corn Belt:                     |      |      |      |      |      |      |      |      |      |       |
| Income.....                    | 123  | 130  | 134  | 125  | 129  | 135  | 114  | 79   | 55   | 61    |
| Value of farm real estate..... | 180  | 174  | 167  | 155  | 151  | 149  | 145  | 129  | 107  | 83    |
| Wheat region:                  |      |      |      |      |      |      |      |      |      |       |
| Income.....                    | 162  | 175  | 164  | 169  | 180  | 177  | 129  | 84   | 60   | 70    |
| Value of farm real estate..... | 160  | 154  | 149  | 147  | 147  | 146  | 145  | 134  | 115  | 94    |
| Hay and dairy region:          |      |      |      |      |      |      |      |      |      |       |
| Income.....                    | 113  | 125  | 128  | 123  | 123  | 125  | 110  | 82   | 61   | 66    |
| Value of farm real estate..... | 161  | 153  | 150  | 145  | 141  | 140  | 136  | 124  | 110  | 93    |
| Cotton Belt:                   |      |      |      |      |      |      |      |      |      |       |
| Income.....                    | 133  | 141  | 122  | 134  | 136  | 137  | 96   | 68   | 57   | 69    |
| Value of farm real estate..... | 143  | 150  | 149  | 143  | 141  | 140  | 139  | 124  | 99   | 83    |
| Grazing region:                |      |      |      |      |      |      |      |      |      |       |
| Income.....                    | 106  | 117  | 114  | 121  | 141  | 136  | 105  | 75   | 54   | 60    |
| Value of farm real estate..... | 147  | 142  | 139  | 139  | 140  | 140  | 141  | 139  | 112  | 94    |
| United States:                 |      |      |      |      |      |      |      |      |      |       |
| Income.....                    | 121  | 130  | 126  | 127  | 130  | 133  | 108  | 78   | 59   | 66    |
| Value of farm real estate..... | 157  | 153  | 150  | 144  | 142  | 140  | 138  | 128  | 107  | 88    |
| Region                         | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943  |
| Corn Belt:                     |      |      |      |      |      |      |      |      |      |       |
| Income.....                    | 76   | 89   | 106  | 104  | 97   | 104  | 113  | 141  | 200  | ----- |
| Value of farm real estate..... | 90   | 93   | 99   | 102  | 103  | 102  | 101  | 101  | 112  | 121   |
| Wheat region:                  |      |      |      |      |      |      |      |      |      |       |
| Income.....                    | 88   | 99   | 103  | 110  | 87   | 101  | 109  | 158  | 221  | ----- |
| Value of farm real estate..... | 96   | 98   | 101  | 103  | 101  | 97   | 92   | 93   | 98   | 109   |
| Hay and dairy region:          |      |      |      |      |      |      |      |      |      |       |
| Income.....                    | 76   | 91   | 105  | 108  | 97   | 99   | 107  | 132  | 173  | ----- |
| Value of farm real estate..... | 94   | 96   | 98   | 102  | 103  | 101  | 101  | 101  | 107  | 116   |
| Cotton Belt:                   |      |      |      |      |      |      |      |      |      |       |
| Income.....                    | 88   | 92   | 99   | 109  | 98   | 101  | 101  | 127  | 174  | ----- |
| Value of farm real estate..... | 90   | 95   | 98   | 101  | 104  | 103  | 104  | 105  | 112  | 120   |
| Grazing region:                |      |      |      |      |      |      |      |      |      |       |
| Income.....                    | 78   | 84   | 98   | 111  | 109  | 107  | 115  | 136  | 184  | ----- |
| Value of farm real estate..... | 95   | 95   | 99   | 102  | 102  | 102  | 103  | 106  | 114  | 123   |
| United States:                 |      |      |      |      |      |      |      |      |      |       |
| Income.....                    | 80   | 92   | 102  | 108  | 96   | 101  | 105  | 134  | 182  | ----- |
| Value of farm real estate..... | 92   | 95   | 99   | 102  | 103  | 101  | 102  | 103  | 110  | 120   |

<sup>1</sup> Revised index numbers of income are based on Bureau of Agricultural Economics estimates of gross income from farm production. The index of value per acre of farm real estate applies to March 1 of each year.

Income-value comparisons for five major agricultural regions (less heterogeneous than the geographic divisions) reveal roughly similar

movements (fig. 5 and table 8).<sup>5</sup> Here again, the relative increases in values naturally are small compared to the relative increases of incomes. The largest relative responses since 1940 have occurred in the grazing region and the smallest in the wheat region.

### FARM REAL ESTATE RENTS AND VALUES

In the foregoing comparisons of farm incomes and land values, no attempt was made to apportion total income among the various productive factors. To get a more direct measure of the return-value relationship, it is necessary to isolate land income from total farm income. Two land-rent series, net cash rents and total net rents (cash and share), are now available for such a purpose.

Several circumstances favor the use of cash rents: Relatively accurate gross cash-rent data are available, expense deductions to obtain net cash rent can be estimated with reasonable accuracy, and these series are available for individual States of the North Central divisions. For periods in which prices of farm products are relatively stable, it is probable that the average value of net returns from cash and share rents over a series of years would be about equal. For such situations cash rents could be used as a general measure of the income attributable to land.

But for periods in which farm prices are changing significantly, it is probable that the lag in the response of cash rents to changes in income is sufficient to invalidate their use as a general measure of land income. Part of the lag in cash rent is attributable to custom, which tends to curb flexibility, and a part is due to longer term rental contracts. Custom is probably even more evident in arrangements for share rentals; but the influence of more or less fixed shares upon changes in the value of rents is much less direct, and significant changes in rental values are possible because of changes in prices and production, even though fractional shares are substantially unchanged.

In contrast, the lag in cash rents directly affects the final rent payment, with the value of the cash-rent payments considerably less flexible than the value of the share-rent payments. The result is that, during periods of rapidly changing incomes, the value of share rents approaches more nearly the changes in farm incomes, and the change in cash rents is considerably slower. During periods of increasing prices, cash rents are probably biased downward and understate the share that land in general may claim. Conversely, when farm prices are falling cash rents have an upward bias, and overstate land income. Furthermore, the use of contract rents introduces a further limitation during periods of rapid changes in price. With prices moving up, the probabilities are that most of the contracts are paid in full. With prices declining, delinquencies and revisions are usually encountered to a considerably greater extent in cash than in share contracts.

The estimated value of net rents from all leased land (including the landlords' share of Government payments) more than doubled from 1940 to 1942 in the North Central States. In contrast, the

<sup>5</sup> Each region is represented only by those States the major parts of which lie within the region. Representing the Corn Belt are Indiana, Illinois, Iowa, and Nebraska; the wheat region, North Dakota, Kansas, and Montana; the hay and dairy region, Minnesota, Wisconsin, Michigan, New York, and Pennsylvania; the Cotton Belt, South Carolina, Georgia, Alabama, Mississippi, Oklahoma, Texas, Louisiana, and Arkansas; and the grazing region, Wyoming, New Mexico, Utah, and Nevada.

increase in cash rents was approximately 25 percent. The current ratio of net rent to the value of leased land for this group of States is just under 10 percent, almost double the comparable cash-rent value ratio. During the last 2 years the rent-value ratio for all leased land has increased approximately 75 percent, whereas the rent-value ratio for cash-rented lands has increased only 5 percent.

It would thus appear that the value of rents based on shares is considerably more sensitive to changes in farm income than are cash rents, and the significance of the latter as a measure of general land income is limited mainly to periods of stable price. Cash rents are still significant as a measure of the land income for the considerable areas of land that are rented on a cash basis. In 1940, approximately one-fourth of the tenant-operated land was rented entirely for cash. This was about the same as the proportion rented on this basis in 1930. The percentage rented for cash in the North Central States is somewhat lower than for the United States as a whole, with approximately 17 percent of the tenant-operated land rented for cash in 1940.

**CASH RENTS AND VALUES.**—Crop reporters for the United States Department of Agriculture have reported the average cash rent paid in their communities each year since 1921, together with the estimated value of the land so rented. The data in tables 9 and 10 for the years since 1921 have been prepared on the basis of such reports. As the landlord has certain expenses to pay from his share of the income and as it is presumably the relation of net rent to value that is most significant, deductions from gross rents have been made for taxes, depreciation, and repairs, to obtain an approximation to net rents. Data on real estate taxes per acre, by States, are based on estimates made by the Bureau of Agricultural Economics and an allowance for depreciation and repairs to buildings has been calculated as 3 percent of the building values. The results, although not applicable to any specific farm, are believed to be representative of the general trends in the returns to cash-rented lands.

In making the calculations reported in the last two columns in table 9 and the whole of table 10, capitalization rates used have been constant. Rates selected are approximately those paid by farmers on mortgage indebtedness during the 1920-29 decade in the respective States.

Rates selected for this use are considered to provide conventionally acceptable standards that are useful in evaluating prevailing value and current rent relationships, even though there may be some legitimate question as to whether such rates constitute proper capitalization rates. The use of a constant capitalization rate emphasizes year-to-year changes and trends in the proportion of value represented by capitalized net rent that arise wholly out of changes in the rents and values reported. Such trends would not be altered through the use of a higher or a lower rate. Thus, the trends for individual States and the variation in trends for the different States are probably the more significant features of this tabulation, as the variation in levels between States may be due in part to differences between the actual and the assumed rates of capitalization.

From the data for Iowa, in table 9, it will be observed that after 1900, the proportion of value represented by capitalized net rents declined, and reached a low point in 1921. Until 1920, this trend was due

to the more rapid increase in land values, whereas in 1921 real estate values declined less than did rents. During the decade following 1921, values continued to decline, whereas rents remained relatively stable, resulting in a gradual rise in the ratio of both gross and net rent to value. During these years the proportion of value represented by capitalized net rents increased from the low of 46 percent in 1921 to 87 percent in 1931. For 1932 and 1933, net rents dropped more than values and so the ratio decreased. But during recent years both net rents and values have increased in Iowa; the somewhat larger increase occurring in net rents brought the proportion of value represented by capitalized net rents to 95 percent for 1942. Virtually equal relative increases in rent and value resulted in a ratio of 94 for 1943.

TABLE 9.—*Approximate gross and net cash rent per acre of farm real estate in Iowa and proportion of current value of land, based on current rents, 1900-1943*

| Year      | Average value per acre of cash rented land | Gross cash rent per acre | Taxes plus estimated depreciation and repairs per acre | Approximate net rent per acre | Ratio of rent to value |          | Net rent capitalized at 5½ percent | Proportion of value represented by capitalized net rent |
|-----------|--------------------------------------------|--------------------------|--------------------------------------------------------|-------------------------------|------------------------|----------|------------------------------------|---------------------------------------------------------|
|           |                                            |                          |                                                        |                               | Gross rent             | Net rent |                                    |                                                         |
|           | Dollars                                    | Dollars                  | Dollars                                                | Dollars                       | Percent                | Percent  | Dollars                            | Percent                                                 |
| 1900..... | 44                                         | 3.88                     | 0.42                                                   | 3.46                          | 8.8                    | 7.9      | 63                                 | 143                                                     |
| 1901..... | 50                                         | 3.89                     | .46                                                    | 3.43                          | 7.8                    | 6.9      | 62                                 | 124                                                     |
| 1902..... | 58                                         | 3.90                     | .51                                                    | 3.39                          | 6.7                    | 5.8      | 62                                 | 107                                                     |
| 1903..... | 66                                         | 3.99                     | .60                                                    | 3.39                          | 6.0                    | 5.1      | 62                                 | 94                                                      |
| 1904..... | 72                                         | 4.15                     | .62                                                    | 3.53                          | 5.8                    | 4.9      | 64                                 | 89                                                      |
| 1905..... | 73                                         | 4.25                     | .62                                                    | 3.63                          | 5.8                    | 5.0      | 66                                 | 90                                                      |
| 1906..... | 73                                         | 4.33                     | .60                                                    | 3.73                          | 5.9                    | 5.1      | 68                                 | 93                                                      |
| 1907..... | 80                                         | 4.45                     | .65                                                    | 3.80                          | 5.6                    | 4.8      | 69                                 | 86                                                      |
| 1908..... | 85                                         | 4.61                     | .67                                                    | 3.94                          | 5.4                    | 4.6      | 72                                 | 85                                                      |
| 1909..... | 91                                         | 4.84                     | .71                                                    | 4.13                          | 5.3                    | 4.5      | 75                                 | 82                                                      |
| 1910..... | 99                                         | 5.05                     | .75                                                    | 4.30                          | 5.1                    | 4.3      | 78                                 | 79                                                      |
| 1911..... | 104                                        | 5.18                     | .82                                                    | 4.36                          | 5.0                    | 4.2      | 79                                 | 76                                                      |
| 1912..... | 110                                        | 5.39                     | .86                                                    | 4.53                          | 4.9                    | 4.1      | 82                                 | 75                                                      |
| 1913..... | 120                                        | 5.49                     | 1.04                                                   | 4.45                          | 4.6                    | 3.7      | 81                                 | 68                                                      |
| 1914..... | 125                                        | 5.90                     | 1.06                                                   | 4.84                          | 4.7                    | 3.9      | 88                                 | 70                                                      |
| 1915..... | 135                                        | 6.31                     | 1.13                                                   | 5.18                          | 4.7                    | 3.8      | 94                                 | 70                                                      |
| 1916..... | 153                                        | 6.76                     | 1.23                                                   | 5.53                          | 4.4                    | 3.6      | 101                                | 66                                                      |
| 1917..... | 160                                        | 7.13                     | 1.35                                                   | 5.78                          | 4.5                    | 3.6      | 105                                | 66                                                      |
| 1918..... | 175                                        | 7.68                     | 1.42                                                   | 6.26                          | 4.4                    | 3.6      | 114                                | 65                                                      |
| 1919..... | 191                                        | 8.47                     | 1.64                                                   | 6.83                          | 4.4                    | 3.6      | 124                                | 65                                                      |
| 1920..... | 255                                        | 9.65                     | 2.03                                                   | 7.62                          | 3.8                    | 3.0      | 139                                | 55                                                      |
| 1921..... | 236                                        | 8.08                     | 2.14                                                   | 5.94                          | 3.4                    | 2.5      | 108                                | 46                                                      |
| 1922..... | 188                                        | 7.42                     | 2.18                                                   | 5.24                          | 3.9                    | 2.8      | 95                                 | 51                                                      |
| 1923..... | 170                                        | 7.39                     | 2.12                                                   | 5.27                          | 4.3                    | 3.1      | 96                                 | 56                                                      |
| 1924..... | 164                                        | 7.38                     | 2.15                                                   | 5.23                          | 4.5                    | 3.2      | 95                                 | 58                                                      |
| 1925..... | 154                                        | 7.39                     | 2.07                                                   | 5.32                          | 4.8                    | 3.5      | 97                                 | 63                                                      |
| 1926..... | 153                                        | 7.55                     | 2.10                                                   | 5.45                          | 4.9                    | 3.6      | 99                                 | 65                                                      |
| 1927..... | 149                                        | 7.69                     | 2.15                                                   | 5.54                          | 5.2                    | 3.7      | 101                                | 68                                                      |
| 1928..... | 142                                        | 7.75                     | 2.15                                                   | 5.60                          | 5.5                    | 3.9      | 102                                | 72                                                      |
| 1929..... | 140                                        | 7.79                     | 2.22                                                   | 5.57                          | 5.6                    | 4.0      | 101                                | 72                                                      |
| 1930..... | 130                                        | 7.77                     | 2.20                                                   | 5.57                          | 6.0                    | 4.3      | 101                                | 78                                                      |
| 1931..... | 114                                        | 7.43                     | 1.99                                                   | 5.44                          | 6.5                    | 4.8      | 99                                 | 87                                                      |
| 1932..... | 93                                         | 6.08                     | 1.73                                                   | 4.35                          | 6.5                    | 4.7      | 79                                 | 85                                                      |
| 1933..... | 70                                         | 4.46                     | 1.45                                                   | 3.01                          | 6.4                    | 4.3      | 55                                 | 79                                                      |
| 1934..... | 78                                         | 4.99                     | 1.47                                                   | 3.52                          | 6.4                    | 4.5      | 64                                 | 82                                                      |
| 1935..... | 81                                         | 5.21                     | 1.60                                                   | 3.61                          | 6.4                    | 4.5      | 66                                 | 81                                                      |
| 1936..... | 88                                         | 5.70                     | 1.70                                                   | 4.00                          | 6.5                    | 4.5      | 73                                 | 83                                                      |
| 1937..... | 87                                         | 5.71                     | 1.72                                                   | 3.99                          | 6.6                    | 4.6      | 73                                 | 84                                                      |
| 1938..... | 89                                         | 5.88                     | 1.75                                                   | 4.13                          | 6.6                    | 4.6      | 75                                 | 84                                                      |
| 1939..... | 86                                         | 5.86                     | 1.79                                                   | 4.07                          | 6.8                    | 4.7      | 74                                 | 86                                                      |
| 1940..... | 86                                         | 5.99                     | 1.75                                                   | 4.24                          | 7.0                    | 4.9      | 77                                 | 90                                                      |
| 1941..... | 89                                         | 6.24                     | 1.79                                                   | 4.45                          | 7.0                    | 5.0      | 81                                 | 91                                                      |
| 1942..... | 96                                         | 6.79                     | 1.76                                                   | 5.03                          | 7.1                    | 5.2      | 91                                 | 95                                                      |
| 1943..... | 107                                        | 7.42                     | 1.86                                                   | 5.56                          | 6.9                    | 5.2      | 101                                | 94                                                      |

<sup>1</sup> Taxes per acre are estimated for 1943.

TABLE 10.—Approximate capitalized net cash rents and proportion of current value of land represented by capitalized net rents, North Central States, 1921-43

| Item, State, and region                                                 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 <sup>1</sup> |
|-------------------------------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------------------|
| NET RENT CAPITALIZED AT APPROXIMATE MORTGAGE INTEREST RATE <sup>2</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                   |
| Ohio.....                                                               | 89   | 63   | 56   | 53   | 51   | 46   | 44   | 43   | 39   | 37   | 36   | 31   | 22   | 30   | 34   | 37   | 43   | 43   | 40   | 40   | 42   | 45   | 51                |
| Indiana.....                                                            | 98   | 72   | 66   | 65   | 60   | 58   | 56   | 52   | 50   | 45   | 43   | 39   | 34   | 45   | 46   | 52   | 56   | 57   | 54   | 56   | 53   | 67   | 78                |
| Illinois.....                                                           | 141  | 103  | 100  | 94   | 92   | 91   | 88   | 88   | 85   | 83   | 67   | 57   | 57   | 63   | 64   | 70   | 73   | 76   | 74   | 76   | 80   | 87   | 99                |
| Michigan.....                                                           | 53   | 44   | 44   | 44   | 40   | 39   | 37   | 35   | 32   | 28   | 27   | 24   | 22   | 27   | 29   | 36   | 35   | 34   | 32   | 34   | 37   | 42   | 50                |
| Wisconsin.....                                                          | 90   | 67   | 64   | 62   | 61   | 58   | 56   | 58   | 55   | 53   | 53   | 43   | 31   | 33   | 31   | 39   | 41   | 39   | 39   | 41   | 41   | 53   | 58                |
| East North Central..                                                    | 106  | 78   | 74   | 70   | 68   | 66   | 64   | 63   | 61   | 59   | 57   | 47   | 38   | 44   | 45   | 51   | 54   | 55   | 52   | 54   | 56   | 64   | 72                |
| Minnesota.....                                                          | 80   | 59   | 51   | 52   | 50   | 50   | 52   | 52   | 52   | 51   | 48   | 45   | 33   | 37   | 38   | 41   | 43   | 42   | 41   | 43   | 45   | 49   | 54                |
| Iowa.....                                                               | 108  | 95   | 96   | 95   | 97   | 99   | 101  | 102  | 101  | 101  | 99   | 79   | 55   | 64   | 66   | 73   | 73   | 75   | 74   | 77   | 77   | 81   | 101               |
| Missouri.....                                                           | 92   | 64   | 62   | 60   | 58   | 57   | 55   | 54   | 52   | 46   | 46   | 39   | 28   | 32   | 31   | 36   | 35   | 37   | 34   | 35   | 36   | 42   | 49                |
| North Dakota.....                                                       | 23   | 18   | 17   | 17   | 15   | 16   | 15   | 16   | 15   | 13   | 11   | 10   | 11   | 10   | 11   | 11   | 10   | 8    | 8    | 8    | 8    | 12   | 15                |
| South Dakota.....                                                       | 58   | 36   | 31   | 29   | 29   | 28   | 27   | 30   | 30   | 30   | 30   | 23   | 19   | 18   | 17   | 18   | 16   | 17   | 16   | 16   | 18   | 20   | 25                |
| Nebraska.....                                                           | 76   | 54   | 51   | 49   | 49   | 50   | 49   | 52   | 53   | 54   | 54   | 44   | 31   | 33   | 31   | 36   | 31   | 32   | 30   | 32   | 29   | 33   | 38                |
| Kansas.....                                                             | 54   | 42   | 39   | 37   | 38   | 37   | 37   | 37   | 39   | 38   | 34   | 28   | 22   | 25   | 24   | 26   | 26   | 27   | 26   | 23   | 26   | 28   | 37                |
| West North Central..                                                    | 97   | 64   | 62   | 61   | 61   | 62   | 62   | 63   | 63   | 63   | 61   | 50   | 36   | 40   | 41   | 45   | 44   | 45   | 44   | 45   | 47   | 53   | 60                |
| PROPORTION OF VALUE REPRESENTED BY CAPITALIZED NET RENT                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                   |
| Ohio.....                                                               | 79   | 64   | 58   | 59   | 59   | 53   | 53   | 55   | 53   | 52   | 59   | 57   | 48   | 60   | 65   | 65   | 69   | 70   | 64   | 67   | 66   | 62   | 63                |
| Indiana.....                                                            | 73   | 65   | 64   | 68   | 67   | 69   | 69   | 69   | 70   | 70   | 70   | 80   | 76   | 92   | 86   | 89   | 88   | 90   | 87   | 87   | 82   | 88   | 88                |
| Illinois.....                                                           | 65   | 59   | 60   | 59   | 60   | 60   | 60   | 62   | 64   | 67   | 72   | 72   | 77   | 77   | 73   | 75   | 75   | 78   | 76   | 76   | 78   | 78   | 81                |
| Michigan.....                                                           | 60   | 54   | 55   | 56   | 53   | 51   | 49   | 47   | 44   | 41   | 44   | 48   | 51   | 59   | 63   | 73   | 70   | 66   | 62   | 66   | 70   | 74   | 76                |
| Wisconsin.....                                                          | 74   | 59   | 60   | 61   | 64   | 62   | 62   | 64   | 63   | 65   | 73   | 67   | 56   | 59   | 52   | 60   | 61   | 62   | 66   | 71   | 75   | 80   | 82                |
| East North Central..                                                    | 68   | 60   | 60   | 59   | 60   | 59   | 59   | 61   | 60   | 62   | 67   | 67   | 63   | 70   | 67   | 71   | 71   | 73   | 70   | 72   | 74   | 75   | 77                |
| Minnesota.....                                                          | 61   | 53   | 49   | 51   | 52   | 52   | 55   | 59   | 61   | 64   | 69   | 76   | 67   | 74   | 73   | 74   | 77   | 75   | 77   | 82   | 84   | 84   | 87                |
| Iowa.....                                                               | 46   | 51   | 56   | 58   | 63   | 65   | 68   | 72   | 72   | 78   | 87   | 85   | 79   | 82   | 81   | 83   | 84   | 84   | 86   | 90   | 91   | 95   | 94                |
| Missouri.....                                                           | 85   | 74   | 78   | 78   | 82   | 81   | 81   | 83   | 86   | 88   | 87   | 89   | 88   | 91   | 86   | 95   | 90   | 95   | 98   | 95   | 95   | 99   | 104               |
| North Dakota.....                                                       | 58   | 58   | 62   | 63   | 63   | 67   | 63   | 67   | 70   | 68   | 68   | 69   | 67   | 65   | 62   | 69   | 66   | 65   | 62   | 63   | 80   | 102  | 116               |
| South Dakota.....                                                       | 64   | 52   | 55   | 54   | 57   | 57   | 59   | 68   | 70   | 71   | 81   | 79   | 79   | 75   | 74   | 77   | 74   | 81   | 83   | 91   | 103  | 103  | 111               |
| Nebraska.....                                                           | 71   | 67   | 65   | 64   | 67   | 64   | 64   | 68   | 71   | 73   | 76   | 77   | 72   | 73   | 70   | 76   | 70   | 76   | 84   | 88   | 91   | 98   | 96                |
| Kansas.....                                                             | 71   | 67   | 65   | 64   | 67   | 65   | 65   | 65   | 68   | 70   | 71   | 76   | 67   | 74   | 71   | 73   | 70   | 74   | 76   | 71   | 80   | 85   | 99                |
| West North Central..                                                    | 66   | 54   | 57   | 58   | 62   | 63   | 65   | 68   | 69   | 74   | 80   | 81   | 75   | 77   | 77   | 79   | 78   | 80   | 82   | 86   | 88   | 93   | 94                |

<sup>1</sup> In obtaining approximate net rents, taxes per acre are estimated for 1943.<sup>2</sup> Approximate mortgage-interest rates used: Illinois, Wisconsin, and Iowa, 5½ percent; Minnesota and Nebraska, 5 percent; Ohio, Indiana, Michigan, Missouri, South Dakota, and Kansas, 6 percent; North Dakota, 6½ percent.

The upward trend in the proportion of values represented by capitalized net rents has been more marked in the West North Central States as a whole than in the East North Central States. The proportion prevailing during the years 1937-41 in the West North Central group was about 37 percent above the average for the 5-year period following 1922, whereas the comparable increase for the East North Central States was 22 percent. In both groups, the ratio in 1921 was higher than for several succeeding years because of a more rapid decline in values than in rents following World War I. From 1922 through 1930 the ratio of capitalized rents to values was surprisingly stable at approximately 60 percent in the East North Central group. Net rents and values were both declining at about the same rates. In contrast, there was a gradual increase in capitalized rent-value relationship in the West North Central group during this period. Values declined more rapidly throughout the period than did values in the East North Central group, whereas rents in the West North Central States were somewhat more firm, even increasing slightly during the middle twenties.

The sharp decrease in values after 1930 raised the proportion of capitalized rents to values in both regions to levels that with some fluctuations have since been essentially maintained. The average current relationship for each region is higher than the average prevailing at any time since data became available.

Since 1921, Indiana, Illinois, Minnesota, and South Dakota have experienced about the same upward trend as Iowa in the proportion of value represented by capitalized net rents. The improved trend was somewhat more gradual in Missouri, Kansas, and Nebraska, but substantial increases have occurred in these States since 1941.

Similarities in the trends for Michigan and Ohio are also found. In contrast to other States in the North Central group, the trend in the ratio of capitalized rent to value in Ohio and Michigan continued to decrease from 1922 to 1930, because rents decreased faster than values. As in the other States in the North Central group, the ratios since 1933 have been at higher levels.

The ratio trends have also followed much the same general pattern in Wisconsin and North Dakota. In these two States the ratios increased gradually until the early thirties. After 1932 came decreases in the ratios, and the lower levels were maintained through 1939. In recent years, the proportion of value represented by capitalized net rents in the various States has been generally higher than that reported in 1933, and in all States except Nebraska the ratio is the same or higher for 1943 than that reported for 1942. In general, this increase in the ratio resulted from slightly higher increases in net cash rents than in the value of the rented land.

**IMPUTED NET RENT AND VALUE.**—The limitations of cash rent-value comparisons indicated earlier, render desirable an attempt to relate land values to the value of all net rents—cash and share. For this purpose an "imputed net rent" series was derived by the following method. (1) A set of rent-value ratios was calculated on the basis of two series, (a) net rent per acre of leased land in farms and (b) value per acre of leased land in farms (value as of March 1 being related to rent of the preceding year). (2) This ratio was applied to the average value per acre of all land in farms (as of March 1) and the resulting amount was designated as the "imputed net rent" per acre in the preceding

year. This series, converted to index form (1912-14=100), is presented in figure 6 along with the index of values and the ratio. The latter, it should be noted again, relates net rent and value of *leased land*. The basic assumption is that the "rent-value ratio" for all farm land is the same as the rent-value ratio for leased land in farms; or, less strictly, that the per acre net rent attributable to all land in farms may be approximated by applying the latter ratio to the value per acre of all land in farms.

Despite some possible theoretical shortcomings, as well as imperfections of basic data (such rents include some returns for management

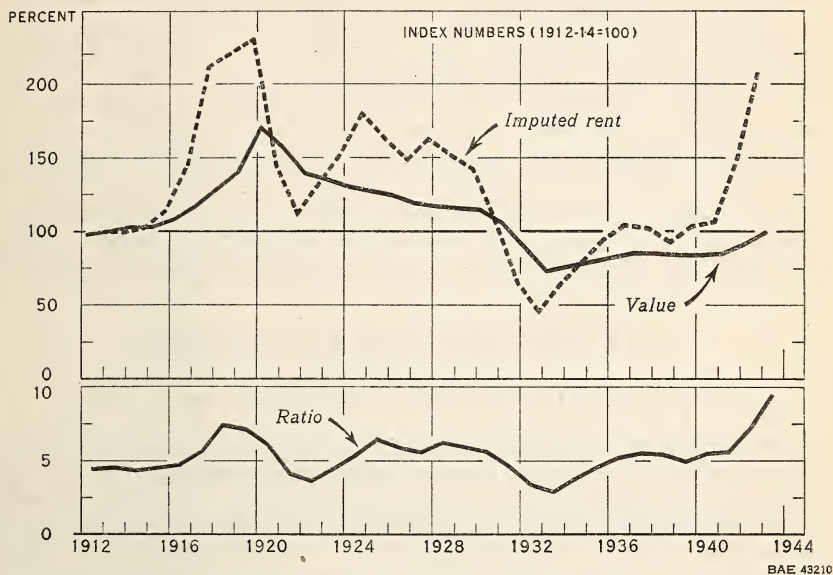


FIGURE 6.—FARM REAL ESTATE: VALUE AND IMPUTED NET RENT PER ACRE AND RATIO OF RENT TO VALUE, UNITED STATES, 1912-43.

Land values during 1912-16 were high relative to current rents. The relatively high rents of 1923-29 did not halt the downward trend of values. So far during World War II, the movements of both rents and values have been similar to those of corresponding years of World War I.

and working capital furnished by landlords) and limitations inherent in the use of averages, the series in figure 6 are believed to indicate reasonably well the general movement of net returns (rent) imputable to farm real estate in relation to farm real estate values.

A primary point suggested by the chart is that during the 5 years preceding our entry into World War I, land values were high relative to current rents. The rent-value ratios for the years 1912-16 averaged slightly less than 4.5 percent. Values during this period would have been on a lower level and the rent-value ratios on a higher level if people generally had not expected the upward secular trend of returns and values to continue. In the light of subsequent developments, the 1925-29 average ratio of 6 percent or the 1937-41 average ratio of 5.4 percent appear more nearly to approximate a normal or equilibrium ratio.

If the rent levels of 1912-14 had been expected to continue indefinitely, values would have been about 25 percent below their actual 1912-14 levels—on the assumption of a 6-percent ratio. It follows that although land values actually rose by 70 percent by 1920, they were then about 125 percent above the indicated 1912-14 hypothetical level. These considerations help to explain why the relatively high net rents of 1923-29 did not halt the downward trend of values that began in 1920 and continued to 1933. (Another major part of the explanation has to do with the large volume of distress lands pressing on the market during the period as well as subsequently.)

The high rent-value ratios of 1942 and 1943 probably should be interpreted as a sign that the dearly bought lessons of the last 30 years are not entirely disregarded. The earlier belief in a continuing upward trend of land values appears to have been shattered. Moreover, primary attention appears to be focused not on current high returns but on the question of probable levels of return over a longer future period. If the general belief continues that farm prices and incomes will return after the war to levels comparable to those of 1935-39, and that no general inflation of large proportions will develop in the meantime, spectacular increases in land values are not likely to occur. But if fear of serious inflation becomes at all widespread, land values may be driven up to high levels.<sup>6</sup>

## CHANGES IN FARM OWNERSHIP

### CONTINUED WARTIME INCREASE IN VOLUNTARY SALES

The frequency of voluntary sales of farm real estate for the country as a whole has increased for the fourth consecutive year. During each of the 2 years just past the level was higher than in any year since the boom period 1919-20 (fig. 7). The average number of voluntary sales and trades for the United States as a whole (including contracts to purchase but not options) was 44.4 farms per 1,000 of all farms for the year ended March 15, 1943 (table 11). This level of voluntary sales was 6 percent above the level reported for 1942, 30 percent above 1941, and over 60 percent above the average for the years 1935-39.

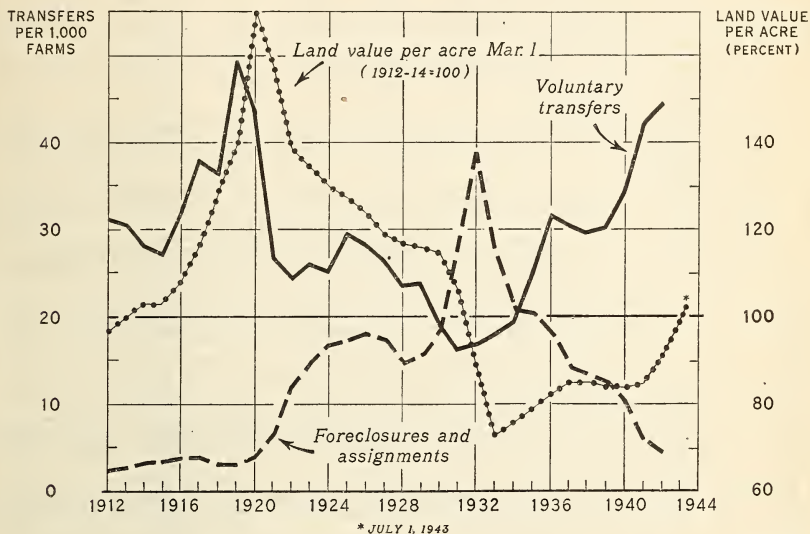
Information from surveys in selected counties indicate that in each of the last three quarters of 1942, the volume of transfers ran somewhat below the levels of comparable periods the previous year, but for the country as a whole this reduction was more than made up by an increased frequency of sales during the first quarter of 1943. Information for the second quarter of 1943 indicates that generally an active farm real estate market has prevailed with a smaller seasonal drop from the first to the second quarter of the current year than was reported in 1942.

Increases in the frequency of voluntary sales were reported from each geographic division for the last year, with the largest increase occurring in the Mountain States. In 33 States the frequency of voluntary sales increased over the previous year, whereas 15 States reported decreases. For the 2 years just past the largest increases occurred in the West North Central, East South Central, and Pacific geographic divisions. In each of these groups of States the frequency for the last year was at least 40 percent above the rate for the year

<sup>6</sup> A more comprehensive discussion of warranted levels of land values may be found on p. 38.

ended March 1941. The continuation of the relatively high volume of voluntary sales of farms reflects increasingly the effects of high levels of farm income, large accumulations of liquid funds by farmers and others, and altered attitudes toward farm real estate as a desirable investment.

Although the current volume of voluntary sales of farms is higher than at any time since immediately following World War I, there has been relatively little evidence of significant speculative activity. In some areas, however, resales of farms bought within the 2 preceding years are becoming increasingly important. Such resales increased in surveyed counties in the Western States to 15 percent of all voluntary



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FIGURE 7.—VOLUME OF FORECLOSURES AND ASSIGNMENTS, VOLUNTARY TRANSFERS, AND INDEX NUMBERS OF VALUE PER ACRE OF FARM REAL ESTATE, UNITED STATES, 1912-43

Voluntary sales per 1,000 farms reached record high levels during the 1919-20 boom and fell to lowest levels in the depression years 1931-33. The rate of voluntary transfer in 1942 exceeded that of any year since 1919. Foreclosures and assignments hit their peak in 1932 but have now declined to levels comparable to those of the years before 1921.

sales for the first quarter of 1943, compared with 7 percent for the first quarter of 1942.

Voluntary sales of farm real estate during the last year accounted for a larger proportion of all sales than at any time since 1926 when data became available. For the year ended March 15, 1943, voluntary sales and trades were 68 percent of all transfers, compared with 63 percent in 1942, 54 percent in 1941, and 18 percent in 1933. A comparison of the levels and trends of voluntary and forced transfers for the various geographic divisions is presented in figure 8. For the United States as a whole, the frequency of forced sales for the year ended March 15, 1943, was only about 15 percent of the frequency of voluntary sales, and the rather high inverse relationship of voluntary and forced transfer frequencies is apparent for each geographic division.

TABLE 11.—Estimated number of farms changing ownership by various methods, per 1,000 of all farms, by States and geographic divisions, years ended Mar. 15, 1939—43

| Division and State  | Voluntary sales and trades <sup>1</sup> |      |      |      |      |                                                         |      |      |      |      | Forced sales and related defaults |      |      |      |      |      |      |      |      |      |
|---------------------|-----------------------------------------|------|------|------|------|---------------------------------------------------------|------|------|------|------|-----------------------------------|------|------|------|------|------|------|------|------|------|
|                     | Delinquent taxes                        |      |      |      |      | Foreclosure of mortgages, bankruptcy, etc. <sup>2</sup> |      |      |      |      | Total                             |      |      |      |      |      |      |      |      |      |
|                     | 1939                                    | 1940 | 1941 | 1942 | 1943 | 1939                                                    | 1940 | 1941 | 1942 | 1943 | 1939                              | 1940 | 1941 | 1942 | 1943 | No.  | No.  | No.  | No.  | No.  |
| United States.....  | 20.7                                    | 30.2 | 34.1 | 41.7 | 44.4 | 3.5                                                     | 3.3  | 3.4  | 3.1  | 2.2  | 13.5                              | 12.6 | 10.5 | 6.2  | 4.4  | 17.0 | 13.9 | 13.9 | 9.3  | 6.6  |
| New England:        |                                         |      |      |      |      |                                                         |      |      |      |      |                                   |      |      |      |      |      |      |      |      |      |
| Maine.....          | 25.3                                    | 24.4 | 28.6 | 28.0 | 31.8 | 4.0                                                     | 3.8  | 5.8  | 6.0  | 7.1  | 13.5                              | 13.1 | 9.1  | 6.4  | 6.9  | 17.5 | 16.9 | 14.9 | 12.4 | 14.0 |
| New Hampshire.....  | 23.0                                    | 22.6 | 23.2 | 24.5 | 25.1 | 3.5                                                     | 3.4  | 3.4  | 3.0  | 2.8  | 6.6                               | 6.5  | 7.8  | 5.0  | 4.6  | 10.1 | 9.9  | 11.2 | 8.0  | 7.4  |
| Vermont.....        | 24.9                                    | 23.8 | 28.2 | 33.0 | 32.2 | 2.4                                                     | 2.6  | 3.8  | 3.2  | 3.0  | 14.9                              | 15.2 | 12.9 | 12.0 | 7.9  | 17.3 | 17.8 | 16.7 | 15.0 | 10.9 |
| Massachusetts.....  | 18.5                                    | 19.0 | 20.4 | 20.0 | 19.5 | 3.6                                                     | 3.4  | 3.0  | 3.5  | 2.7  | 6.9                               | 7.0  | 7.4  | 7.5  | 6.5  | 10.5 | 10.4 | 10.4 | 11.0 | 9.2  |
| Rhode Island.....   | 20.6                                    | 20.1 | 20.5 | 21.4 | 20.8 | 1.0                                                     | .9   | .7   | .7   | .6   | 3.8                               | 4.1  | 3.6  | 3.0  | 3.0  | 4.8  | 5.0  | 4.3  | 3.7  | 3.6  |
| Connecticut.....    | 18.0                                    | 17.0 | 18.7 | 19.4 | 19.8 | 1.1                                                     | 1.0  | .9   | .8   | .6   | 2.3                               | 3.2  | 3.8  | 3.2  | 2.8  | 3.4  | 4.2  | 4.7  | 4.0  | 3.4  |
| Middle Atlantic:    |                                         |      |      |      |      |                                                         |      |      |      |      |                                   |      |      |      |      |      |      |      |      |      |
| New York.....       | 28.2                                    | 26.8 | 34.2 | 40.8 | 40.9 | 4.5                                                     | 4.1  | 4.2  | 3.6  | 1.9  | 9.2                               | 7.7  | 10.7 | 6.4  | 4.8  | 13.7 | 11.8 | 14.9 | 10.0 | 6.7  |
| New Jersey.....     | 24.6                                    | 26.5 | 28.1 | 27.6 | 22.1 | 3.8                                                     | 5.7  | 4.5  | 4.0  | 3.1  | 14.3                              | 15.2 | 17.6 | 6.2  | 5.8  | 18.1 | 20.9 | 22.1 | 20.2 | 8.9  |
| Pennsylvania.....   | 27.4                                    | 25.4 | 27.9 | 34.4 | 37.6 | 4.0                                                     | 3.2  | 2.8  | 2.2  | 2.3  | 8.6                               | 10.1 | 8.9  | 4.5  | 3.6  | 12.6 | 13.3 | 11.7 | 6.7  | 6.4  |
| East North Central: |                                         |      |      |      |      |                                                         |      |      |      |      |                                   |      |      |      |      |      |      |      |      |      |
| Ohio.....           | 27.5                                    | 32.0 | 35.8 | 39.1 | 45.6 | 2.0                                                     | 1.8  | 1.2  | 1.7  | .8   | 7.5                               | 7.5  | 5.6  | 4.5  | 3.0  | 9.5  | 9.3  | 6.8  | 6.2  | 3.8  |
| Indiana.....        | 37.0                                    | 38.3 | 45.6 | 52.6 | 51.5 | 2.4                                                     | 1.9  | 2.0  | 1.8  | .0   | 9.3                               | 8.5  | 9.0  | 5.9  | 1.9  | 11.7 | 10.4 | 11.0 | 7.7  | 2.9  |
| Illinois.....       | 25.9                                    | 29.4 | 35.5 | 41.1 | 40.5 | 1.1                                                     | .8   | .8   | .6   | .3   | 10.2                              | 9.4  | 7.2  | 4.9  | 2.9  | 11.3 | 10.2 | 8.0  | 5.5  | 3.2  |
| Michigan.....       | 26.8                                    | 31.1 | 32.3 | 40.4 | 46.3 | 2.6                                                     | 3.5  | 2.7  | 3.4  | 1.2  | 11.1                              | 12.4 | 9.7  | 5.0  | 3.2  | 13.7 | 15.9 | 12.4 | 8.4  | 4.4  |
| Wisconsin.....      | 19.9                                    | 19.6 | 27.9 | 41.3 | 44.6 | 3.0                                                     | 2.2  | 2.9  | 1.9  | 1.5  | 19.7                              | 19.2 | 17.3 | 7.9  | 10.0 | 22.7 | 21.4 | 20.2 | 9.8  | 11.5 |
| West North Central: |                                         |      |      |      |      |                                                         |      |      |      |      |                                   |      |      |      |      |      |      |      |      |      |
| Minnesota.....      | 31.7                                    | 34.8 | 37.0 | 43.4 | 42.6 | 4.0                                                     | 4.6  | 4.0  | 4.4  | 3.1  | 18.4                              | 18.2 | 12.4 | 9.2  | 5.8  | 22.4 | 22.8 | 16.9 | 13.6 | 8.9  |
| Iowa.....           | 32.1                                    | 38.8 | 43.1 | 49.9 | 49.1 | 1.4                                                     | 1.0  | 1.0  | .5   | .2   | 11.6                              | 11.6 | 6.1  | 3.5  | 1.9  | 13.0 | 12.6 | 7.1  | 4.0  | 2.1  |
| Missouri.....       | 33.0                                    | 37.7 | 40.4 | 56.2 | 59.5 | 4.3                                                     | 4.0  | 4.5  | 2.0  | 1.2  | 29.0                              | 33.1 | 10.6 | 4.5  | 3.0  | 25.3 | 21.9 | 15.1 | 6.5  | 4.2  |
| North Dakota.....   | 14.4                                    | 26.3 | 39.9 | 58.9 | 57.2 | 14.9                                                    | 16.3 | 22.5 | 18.9 | 12.6 | 29.5                              | 17.9 | 27.0 | 23.5 | 16.7 | 44.4 | 49.4 | 49.5 | 42.4 | 29.3 |
| South Dakota.....   | 25.3                                    | 34.1 | 48.9 | 64.5 | 66.4 | 9.3                                                     | 12.8 | 12.2 | 9.9  | 9.6  | 41.1                              | 35.5 | 24.9 | 13.1 | 11.1 | 50.4 | 48.3 | 37.1 | 23.0 | 20.7 |
| Nebraska.....       | 20.8                                    | 30.0 | 28.3 | 47.1 | 52.8 | 3.1                                                     | 4.1  | 5.8  | 2.6  | 1.6  | 36.8                              | 32.6 | 31.1 | 21.4 | 13.6 | 39.9 | 36.7 | 32.9 | 24.3 | 15.2 |
| Kansas.....         | 22.6                                    | 23.1 | 27.0 | 44.2 | 50.4 | 1.7                                                     | 1.8  | 2.6  | 1.5  | 2.6  | 24.0                              | 26.0 | 25.3 | 21.9 | 12.6 | 25.7 | 27.8 | 27.9 | 13.4 | 15.2 |

| <b>South Atlantic:</b>     |      |      |      |      |      |      |      |      |      |      |      |      |      |     |      |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|
| Delaware.....              | 17.9 | 20.4 | 19.9 | 20.0 | 26.9 | 1.0  | .8   | .6   | .5   | 8.3  | 11.8 | 8.3  | 9.0  | 5.4 | 9.6  |
| Maryland.....              | 23.0 | 25.3 | 37.7 | 48.2 | 46.7 | 3.0  | 1.4  | 1.1  | .9   | 8.0  | 8.0  | 7.8  | 2.4  | 3.6 | 3.5  |
| Virginia.....              | 27.4 | 29.5 | 29.8 | 29.9 | 32.0 | 3.0  | 2.2  | 2.4  | 1.4  | 11.9 | 11.1 | 11.5 | 5.3  | 2.0 | 6.7  |
| West Virginia.....         | 22.1 | 18.6 | 15.9 | 28.0 | 29.1 | 3.4  | 2.7  | 3.0  | 3.0  | 12.7 | 9.2  | 6.6  | 3.2  | 2.0 | 8.9  |
| North Carolina.....        | 30.1 | 26.2 | 23.6 | 26.0 | 32.6 | 2.9  | 2.5  | 2.4  | .9   | 9.4  | 9.4  | 7.9  | 3.0  | 2.5 | 10.3 |
| South Carolina.....        | 23.5 | 30.4 | 33.1 | 36.1 | 33.5 | 3.5  | 4.4  | 5.1  | 1.6  | 9.9  | 9.1  | 8.1  | 4.2  | 3.7 | 13.5 |
| Georgia.....               | 29.9 | 25.4 | 35.6 | 44.6 | 38.2 | 4.4  | 3.1  | 2.4  | 2.0  | 9.2  | 7.4  | 9.5  | 6.6  | 2.6 | 8.8  |
| Florida.....               | 24.6 | 21.5 | 32.5 | 30.5 | 33.2 | 3.8  | 2.4  | 2.9  | 3.1  | 7.7  | 7.6  | 6.6  | 6.5  | 6.2 | 9.8  |
| <b>East South Central:</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |     |      |
| Kentucky.....              | 37.6 | 37.2 | 34.7 | 49.7 | 53.5 | 2.9  | 1.6  | 1.2  | 1.7  | 7.6  | 7.0  | 8.9  | 3.7  | 2.3 | 10.1 |
| Tennessee.....             | 37.2 | 33.9 | 36.8 | 49.5 | 56.7 | 3.0  | 2.1  | 2.0  | 3.5  | 10.0 | 7.6  | 7.8  | 2.3  | 2.6 | 9.8  |
| Alabama.....               | 36.7 | 29.9 | 30.1 | 32.4 | 40.0 | 2.6  | 3.2  | 2.2  | 1.6  | 8.8  | 10.9 | 10.1 | 5.1  | 4.8 | 12.3 |
| Mississippi.....           | 33.8 | 28.4 | 31.3 | 31.6 | 37.1 | 7.3  | 3.5  | 2.5  | 5.2  | 10.6 | 9.6  | 7.3  | 7.6  | 3.1 | 9.8  |
| <b>West South Central:</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |     |      |
| Arkansas.....              | 41.5 | 43.4 | 48.8 | 50.6 | 54.6 | 4.9  | 5.0  | 6.5  | 3.1  | 13.7 | 12.7 | 6.8  | 3.9  | 3.2 | 13.3 |
| Louisiana.....             | 18.2 | 17.1 | 18.0 | 21.0 | 22.9 | 1.8  | 1.8  | 2.4  | 2.3  | 10.8 | 9.8  | 8.9  | 4.8  | 2.8 | 11.6 |
| Oklahoma.....              | 35.9 | 36.5 | 43.0 | 53.5 | 53.7 | 3.5  | 5.4  | 7.8  | 3.8  | 13.6 | 11.0 | 8.0  | 6.0  | 4.1 | 16.4 |
| Texas.....                 | 28.2 | 28.4 | 33.1 | 41.7 | 41.0 | 1.6  | 1.3  | 1.2  | 1.8  | 12.6 | 10.6 | 6.3  | 2.9  | 2.3 | 11.9 |
| <b>Mountain:</b>           |      |      |      |      |      |      |      |      |      |      |      |      |      |     |      |
| Montana.....               | 27.0 | 30.3 | 39.6 | 36.6 | 43.3 | 12.4 | 10.6 | 12.7 | 10.9 | 16.1 | 10.8 | 12.2 | 8.1  | 5.6 | 24.9 |
| Idaho.....                 | 38.7 | 29.0 | 34.4 | 33.2 | 43.5 | 2.6  | 3.9  | 1.9  | 1.4  | 11.5 | 8.2  | 9.6  | 6.0  | 4.1 | 12.1 |
| Wyoming.....               | 29.5 | 29.2 | 34.7 | 36.5 | 42.7 | 4.0  | 5.4  | 5.3  | 2.2  | 12.7 | 15.4 | 12.5 | 7.5  | 3.8 | 11.5 |
| Colorado.....              | 38.3 | 37.0 | 36.8 | 35.0 | 44.0 | 8.2  | 6.0  | 8.5  | 8.3  | 21.6 | 17.3 | 12.9 | 8.9  | 4.6 | 17.8 |
| New Mexico.....            | 31.7 | 34.7 | 33.5 | 32.0 | 35.9 | 9.0  | 7.9  | 9.2  | 4.4  | 18.5 | 15.0 | 14.8 | 8.7  | 4.9 | 23.3 |
| Arizona.....               | 28.2 | 26.0 | 32.9 | 36.0 | 35.2 | 7.8  | 7.2  | 8.8  | 4.1  | 9.3  | 8.8  | 8.6  | 5.0  | 2.8 | 24.0 |
| Utah.....                  | 17.9 | 17.2 | 16.6 | 17.8 | 21.5 | 8.0  | 7.4  | 5.0  | 3.5  | 16.0 | 15.0 | 14.3 | 10.6 | 6.0 | 17.4 |
| Nevada.....                | 18.5 | 19.5 | 20.4 | 23.0 | 23.4 | 4.8  | 4.1  | 4.0  | 3.0  | 13.4 | 14.5 | 13.8 | 8.2  | 4.4 | 19.5 |
| <b>Pacific:</b>            |      |      |      |      |      |      |      |      |      |      |      |      |      |     |      |
| Washington.....            | 33.6 | 36.6 | 41.3 | 34.6 | 41.7 | 5.6  | 5.0  | 3.2  | 2.6  | 15.5 | 12.4 | 7.8  | 3.4  | 1.8 | 17.4 |
| Oregon.....                | 38.0 | 37.8 | 46.5 | 50.4 | 59.1 | 3.0  | 4.6  | 4.6  | 3.8  | 14.3 | 15.7 | 11.9 | 10.0 | 5.2 | 20.3 |
| California.....            | 36.3 | 33.1 | 33.3 | 55.0 | 57.6 | 2.2  | 3.0  | 1.8  | 1.1  | 13.5 | 13.0 | 12.6 | 6.8  | 6.4 | 14.4 |

<sup>1</sup> Including contracts to purchase (but not options).  
<sup>2</sup> Including loss of title by default of contract, sales to avoid foreclosure, and surrender of title or other transfers to avoid foreclosure.

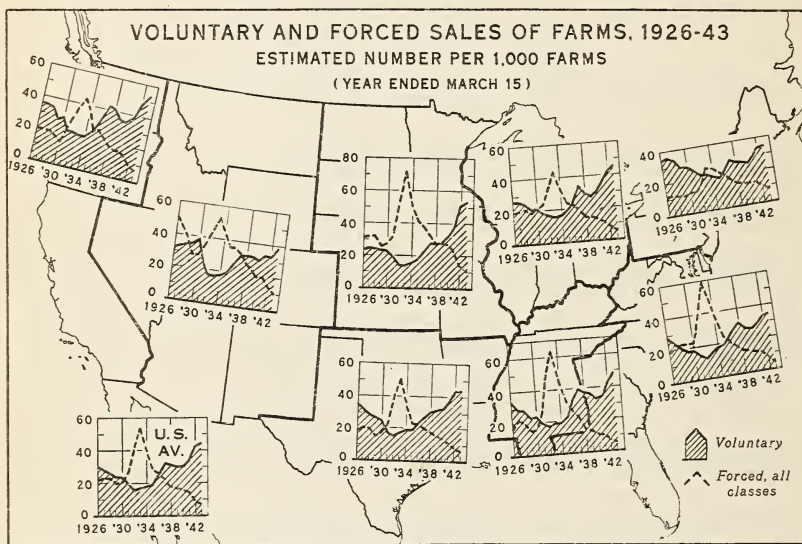
TABLE 11.—Estimated number of farms changing ownership by various methods per 1,000 of all farms, by State and geographic divisions, years ended Mar. 15, 1939-43—Continued

| Division and State      | Inheritance and gift |      |      |      |      | Administrators' and executors' sales <sup>3</sup> |      |      |      |      | Miscellaneous and unclassified |      |      |      |      | Total all classes |      |       |      |  |
|-------------------------|----------------------|------|------|------|------|---------------------------------------------------|------|------|------|------|--------------------------------|------|------|------|------|-------------------|------|-------|------|--|
|                         | 1939                 | 1940 | 1941 | 1942 | 1943 | 1939                                              | 1940 | 1941 | 1942 | 1943 | 1939                           | 1940 | 1941 | 1942 | 1943 |                   |      |       |      |  |
|                         | No.                  | No.  | No.  | No.  | No.  | No.                                               | No.  | No.  | No.  | No.  | No.                            | No.  | No.  | No.  | No.  |                   |      |       |      |  |
| United States.....      | 7.6                  | 7.2  | 6.1  | 5.7  | 5.3  | 8.0                                               | 8.2  | 8.1  | 8.0  | 8.1  | 1.5                            | 1.5  | 1.5  | 1.4  | 1.2  | 63.0              | 63.7 | 66.1  | 65.6 |  |
| New England.....        | 8.5                  | 8.2  | 8.1  | 7.5  | 7.3  | 5.7                                               | 5.8  | 5.7  | 5.9  | 5.1  | 1.6                            | 1.4  | 1.2  | 1.5  | 1.5  | 49.9              | 51.5 | 50.9  | 50.1 |  |
| Middle Atlantic.....    | 6.9                  | 7.0  | 7.0  | 6.4  | 5.9  | 8.3                                               | 8.7  | 7.6  | 9.0  | 7.9  | 1.6                            | 1.2  | 1.3  | 1.3  | 1.2  | 56.2              | 60.6 | 62.0  | 59.7 |  |
| East North Central..... | 7.1                  | 6.9  | 5.7  | 5.2  | 4.9  | 10.3                                              | 10.6 | 11.5 | 10.2 | 11.0 | 1.1                            | 1.1  | 1.4  | 1.2  | .9   | 61.9              | 63.4 | 66.7  | 67.3 |  |
| West North Central..... | 8.1                  | 7.1  | 5.6  | 4.4  | 4.7  | 8.6                                               | 8.5  | 8.6  | 8.7  | 9.5  | 1.4                            | 1.6  | 1.5  | 1.4  | 1.7  | 76.1              | 75.0 | 79.3  | 79.2 |  |
| South Atlantic.....     | 10.1                 | 10.2 | 8.6  | 7.9  | 7.1  | 8.3                                               | 8.9  | 8.6  | 8.7  | 7.8  | 1.3                            | 1.2  | 1.5  | 1.0  | .9   | 58.1              | 59.0 | 58.0  | 54.3 |  |
| East South Central..... | 8.0                  | 6.1  | 5.4  | 5.5  | 4.8  | 8.9                                               | 8.6  | 8.4  | 7.7  | 8.0  | 1.6                            | 1.9  | 1.3  | 1.4  | 1.3  | 60.1              | 59.1 | 63.9  | 66.6 |  |
| West South Central..... | 6.1                  | 5.8  | 5.4  | 5.9  | 4.7  | 5.0                                               | 5.5  | 5.0  | 5.2  | 5.3  | 2.0                            | 1.8  | 1.8  | 2.1  | .7   | 60.0              | 59.9 | 65.2  | 60.9 |  |
| Mountain.....           | 4.4                  | 4.5  | 4.6  | 4.0  | 3.7  | 5.0                                               | 5.1  | 5.4  | 5.7  | 5.5  | 1.6                            | 1.7  | 1.4  | 1.8  | 1.6  | 66.8              | 65.1 | 68.7  | 60.8 |  |
| Pacific.....            | 4.9                  | 4.9  | 4.5  | 4.2  | 4.7  | 5.7                                               | 5.4  | 4.8  | 5.7  | 5.3  | 2.3                            | 2.3  | 1.9  | 2.2  | 1.8  | 66.3              | 63.4 | 69.7  | 72.3 |  |
| New England:            |                      |      |      |      |      |                                                   |      |      |      |      |                                |      |      |      |      |                   |      |       |      |  |
| Maine.....              | 10.6                 | 10.1 | 9.5  | 8.8  | 8.5  | 5.5                                               | 5.3  | 5.7  | 6.5  | 5.5  | 2.0                            | 1.4  | 1.1  | 1.5  | 1.3  | 58.1              | 59.8 | 57.2  | 61.1 |  |
| New Hampshire.....      | 8.0                  | 7.9  | 7.9  | 7.4  | 7.5  | 4.0                                               | 3.5  | 3.2  | 5.8  | 4.8  | 1.6                            | 1.2  | 1.5  | 1.2  | 1.8  | 47.1              | 49.0 | 46.9  | 46.6 |  |
| Vermont.....            | 6.1                  | 6.0  | 5.7  | 5.4  | 5.6  | 10.2                                              | 10.6 | 9.8  | 9.8  | 7.6  | 1.5                            | 1.5  | 1.5  | 1.3  | 2.1  | 59.7              | 61.6 | 64.7  | 58.4 |  |
| Massachusetts.....      | 7.2                  | 7.1  | 7.1  | 6.9  | 6.8  | 3.9                                               | 3.3  | 3.3  | 3.0  | 3.2  | 1.3                            | 1.1  | .9   | 2.1  | 1.5  | 40.9              | 42.1 | 43.0  | 40.2 |  |
| Rhode Island.....       | 6.0                  | 6.0  | 6.1  | 5.8  | 5.8  | 4.4                                               | 4.3  | 4.3  | 4.2  | 4.0  | 1.0                            | .9   | .9   | 1.0  | 1.0  | 36.3              | 36.1 | 35.2  | 35.2 |  |
| Connecticut.....        | 9.6                  | 8.9  | 9.8  | 8.6  | 7.6  | 5.3                                               | 5.3  | 5.0  | 4.6  | 4.6  | 1.2                            | 1.8  | 1.5  | 1.4  | 1.2  | 37.5              | 39.7 | 38.0  | 36.6 |  |
| Middle Atlantic:        |                      |      |      |      |      |                                                   |      |      |      |      |                                |      |      |      |      |                   |      |       |      |  |
| New York.....           | 7.3                  | 7.2  | 7.5  | 6.7  | 6.1  | 5.0                                               | 5.6  | 5.4  | 6.5  | 5.1  | 1.3                            | 1.1  | .8   | .9   | 1.5  | 52.5              | 62.8 | 64.9  | 60.3 |  |
| New Jersey.....         | 6.1                  | 7.3  | 7.1  | 6.6  | 6.0  | 8.8                                               | 8.4  | 8.9  | 8.7  | 10.9 | 1.0                            | 1.0  | 1.8  | .9   | .9   | 58.6              | 64.1 | 54.0  | 48.8 |  |
| Pennsylvania.....       | 6.7                  | 6.8  | 6.6  | 6.0  | 5.7  | 11.3                                              | 11.7 | 9.4  | 11.4 | 10.1 | 2.0                            | 1.4  | 1.6  | 1.7  | 1.0  | 60.0              | 57.2 | 60.2  | 60.8 |  |
| East North Central:     |                      |      |      |      |      |                                                   |      |      |      |      |                                |      |      |      |      |                   |      |       |      |  |
| Ohio.....               | 8.8                  | 8.9  | 7.2  | 6.7  | 6.8  | 11.5                                              | 11.9 | 12.8 | 11.5 | 12.7 | 1.0                            | .9   | 1.2  | 1.4  | .6   | 58.3              | 63.8 | 64.9  | 69.5 |  |
| Indiana.....            | 8.3                  | 7.8  | 6.4  | 5.9  | 5.1  | 11.5                                              | 13.0 | 13.7 | 12.9 | 11.7 | 1.3                            | 1.0  | 1.7  | .6   | 1.0  | 60.8              | 70.5 | 79.7  | 72.2 |  |
| Illinois.....           | 7.6                  | 6.5  | 5.6  | 4.7  | 4.4  | 14.3                                              | 13.8 | 14.0 | 10.5 | 14.5 | 1.2                            | 1.1  | .9   | 1.2  | .9   | 60.3              | 61.0 | 63.0  | 63.4 |  |
| Michigan.....           | 5.5                  | 5.8  | 4.5  | 4.0  | 4.2  | 6.8                                               | 7.5  | 9.1  | 8.5  | 9.0  | 1.0                            | 1.3  | 1.1  | .7   | .8   | 53.8              | 61.6 | 62.0  | 64.7 |  |
| Wisconsin.....          | 5.0                  | 4.9  | 4.6  | 4.6  | 3.4  | 6.4                                               | 6.0  | 7.3  | 7.1  | 6.2  | 1.1                            | 1.1  | 2.3  | 1.8  | 1.2  | 55.1              | 53.0 | 62.3  | 66.9 |  |
| West North Central:     |                      |      |      |      |      |                                                   |      |      |      |      |                                |      |      |      |      |                   |      |       |      |  |
| Minnesota.....          | 6.8                  | 6.2  | 6.1  | 4.4  | 4.9  | 8.2                                               | 7.8  | 7.5  | 8.7  | 9.5  | 1.3                            | 2.5  | 1.2  | 1.1  | 2.1  | 70.4              | 74.1 | 68.7  | 68.0 |  |
| Iowa.....               | 7.1                  | 6.5  | 4.8  | 4.5  | 3.7  | 10.7                                              | 11.6 | 11.1 | 11.0 | 10.9 | 1.5                            | 1.0  | .9   | 1.8  | .9   | 64.4              | 70.5 | 67.0  | 66.7 |  |
| Missouri.....           | 7.7                  | 7.2  | 5.6  | 4.7  | 4.9  | 9.2                                               | 8.6  | 9.0  | 8.6  | 8.7  | 1.6                            | 1.3  | 2.3  | 1.4  | 2.4  | 76.8              | 76.7 | 72.4  | 79.7 |  |
| North Dakota.....       | 6.5                  | 6.2  | 3.9  | 3.1  | 2.7  | 4.3                                               | 5.0  | 4.2  | 5.4  | 6.2  | 1.3                            | 1.4  | .8   | 1.5  | 1.6  | 70.9              | 88.3 | 111.3 | 97.0 |  |
| South Dakota.....       | 8.8                  | 6.9  | 3.8  | 2.9  | 3.2  | 6.6                                               | 5.7  | 6.1  | 5.2  | 5.2  | 1.2                            | 2.7  | 1.3  | 1.0  | 2.1  | 92.2              | 97.7 | 96.6  | 98.8 |  |
| Nebraska.....           | 10.6                 | 7.5  | 5.1  | 3.4  | 4.9  | 9.3                                               | 8.1  | 9.4  | 9.1  | 11.2 | 1.1                            | 1.4  | 2.4  | 2.0  | 1.6  | 81.7              | 73.7 | 78.1  | 85.9 |  |
| Kansas.....             | 10.2                 | 9.1  | 8.4  | 6.0  | 7.1  | 8.0                                               | 8.5  | 8.9  | 8.5  | 10.6 | 1.3                            | 1.8  | 1.0  | .8   | .9   | 67.8              | 70.3 | 72.9  | 84.2 |  |



## TYPES OF BUYERS AND SELLERS

Reports from farm real estate dealers for the year ended March 15, 1943, indicate a slight increase from the preceding year in the proportion of farms bought for operation and by local residents (table 12). For the country as a whole, about three-fourths of the purchases in the last several years have been for operation; and local residents have been buying slightly more than four-fifths of the farms transferred in voluntary sales and trades. Since 1935, there has been relatively little year-to-year variation in these ratios, either for the United States or for most geographic divisions. The largest proportionate changes during the last year occurred in the New England and Middle Atlantic



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FIGURE 8.—VOLUNTARY AND FORCED SALES OF FARMS, 1926-43.

Frequency of voluntary transfers of farm real estate increased during the year 1942-43 in all geographic divisions. The downward trend of forced transfers continued in all divisions.

States. In New England, local resident buyers increased from about one-half to more than two-thirds of all buyers, the latter ratio being higher than for any year since data became available in 1928. Purchases for operation also increased during the last year in both the New England and the Middle Atlantic groups of States, with the proportion reported higher than for any year since 1934.

Active farmers were reported as buyers in 64 percent of the transfers in 1942-43, a slight increase from the preceding year. However, the level is somewhat below the average for the years 1939-41, when about two-thirds of the transfers were made to farmers. For the country as a whole, approximately one-half of the active farmers buying land during the last year were tenants. In the West North Central States, more than 60 percent of the active farmer-buyers were tenants, whereas in the New England and Pacific geographic divisions only about one-third were tenants.

TABLE 12.—*Voluntary sales and trades of farm real estate: Percentage of purchases reported in specified classes of residence, occupation, and purpose of purchase, for the United States and for geographic divisions, years ended Mar. 15, 1930-43.*

| Division                | Local residents |             |             |             |             |             |             |             |             |             |             |             |             |             |
|-------------------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                         | 1930            | 1931        | 1932        | 1933        | 1934        | 1935        | 1936        | 1937        | 1938        | 1939        | 1940        | 1941        | 1942        | 1943        |
|                         | <i>Pct.</i>     | <i>Pct.</i> | <i>Pct.</i> | <i>Pct.</i> | <i>Pct.</i> | <i>Pct.</i> | <i>Pct.</i> | <i>Pct.</i> | <i>Pct.</i> | <i>Pct.</i> | <i>Pct.</i> | <i>Pct.</i> | <i>Pct.</i> | <i>Pct.</i> |
| New England.....        | 59              | 48          | 51          | 50          | 56          | 58          | 56          | 55          | 60          | 63          | 52          | 48          | 48          | 69          |
| Middle Atlantic.....    | 70              | 70          | 69          | 68          | 69          | 72          | 77          | 71          | 72          | 71          | 74          | 73          | 66          | 71          |
| East North Central..... | 83              | 84          | 78          | 78          | 78          | 85          | 83          | 83          | 83          | 84          | 86          | 82          | 80          | 82          |
| West North Central..... | 89              | 88          | 85          | 81          | 82          | 83          | 84          | 84          | 86          | 88          | 88          | 87          | 86          | 89          |
| South Atlantic.....     | 82              | 82          | 79          | 76          | 81          | 82          | 86          | 84          | 82          | 83          | 86          | 84          | 80          | 83          |
| East South Central..... | 90              | 85          | 87          | 86          | 88          | 86          | 85          | 91          | 88          | 90          | 88          | 87          | 86          | 88          |
| West South Central..... | 82              | 77          | 73          | 76          | 78          | 78          | 81          | 78          | 80          | 82          | 83          | 82          | 83          | 82          |
| Mountain.....           | 81              | 77          | 76          | 77          | 84          | 80          | 78          | 82          | 84          | 86          | 86          | 85          | 85          | 84          |
| Pacific.....            | 71              | 72          | 66          | 70          | 71          | 72          | 72          | 74          | 74          | 75          | 75          | 73          | 69          | 69          |
| United States.....      | 82              | 81          | 77          | 76          | 78          | 81          | 82          | 81          | 81          | 83          | 83          | 82          | 80          | 82          |
| Purchase for operation  |                 |             |             |             |             |             |             |             |             |             |             |             |             |             |
| New England.....        | 80              | 79          | 85          | 85          | 74          | 68          | 73          | 71          | 74          | 73          | 72          | 71          | 62          | 78          |
| Middle Atlantic.....    | 82              | 85          | 82          | 83          | 79          | 78          | 79          | 76          | 77          | 75          | 73          | 75          | 69          | 81          |
| East North Central..... | 80              | 82          | 77          | 75          | 73          | 72          | 72          | 71          | 74          | 78          | 77          | 73          | 71          | 74          |
| West North Central..... | 82              | 81          | 76          | 74          | 72          | 73          | 74          | 69          | 75          | 74          | 77          | 81          | 76          | 77          |
| South Atlantic.....     | 78              | 80          | 78          | 75          | 75          | 71          | 78          | 74          | 77          | 81          | 80          | 78          | 73          | 72          |
| East South Central..... | 79              | 79          | 81          | 80          | 78          | 78          | 79          | 83          | 80          | 82          | 80          | 78          | 79          | 82          |
| West South Central..... | 73              | 70          | 68          | 68          | 67          | 66          | 71          | 74          | 73          | 77          | 79          | 79          | 74          | 76          |
| Mountain.....           | 87              | 88          | 87          | 88          | 84          | 84          | 84          | 87          | 88          | 86          | 87          | 87          | 86          | 83          |
| Pacific.....            | 84              | 90          | 88          | 88          | 89          | 86          | 84          | 89          | 84          | 84          | 86          | 82          | 83          | 85          |
| United States.....      | 81              | 81          | 79          | 77          | 75          | 74          | 76          | 75          | 77          | 78          | 78          | 78          | 75          | 77          |
| Occupation of purchaser |                 |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Active farmer           |                 |             |             |             |             |             |             |             |             |             |             |             |             |             |
| New England.....        | 59              | 42          | 37          | 40          | 42          | 40          | 46          | 35          | 39          | 40          | 46          | 36          | 30          | 38          |
| Middle Atlantic.....    | 56              | 50          | 45          | 42          | 47          | 51          | 51          | 47          | 45          | 45          | 48          | 50          | 44          | 45          |
| East North Central..... | 67              | 60          | 55          | 48          | 55          | 60          | 58          | 60          | 63          | 66          | 64          | 61          | 58          | 60          |
| West North Central..... | 81              | 75          | 67          | 58          | 65          | 69          | 69          | 68          | 67          | 71          | 78          | 79          | 72          | 73          |
| South Atlantic.....     | 66              | 62          | 55          | 54          | 59          | 60          | 65          | 66          | 60          | 65          | 67          | 62          | 58          | 60          |
| East South Central..... | 74              | 69          | 65          | 66          | 69          | 71          | 71          | 72          | 74          | 74          | 72          | 70          | 70          | 73          |
| West South Central..... | 70              | 64          | 53          | 49          | 54          | 61          | 62          | 63          | 63          | 69          | 69          | 72          | 68          | 66          |
| Mountain.....           | 83              | 76          | 67          | 68          | 70          | 77          | 77          | 76          | 79          | 77          | 80          | 78          | 77          | 75          |
| Pacific.....            | 71              | 65          | 51          | 52          | 54          | 62          | 62          | 62          | 48          | 63          | 64          | 56          | 55          | 56          |
| United States.....      | 72              | 65          | 57          | 53          | 58          | 63          | 64          | 63          | 62          | 66          | 68          | 67          | 63          | 64          |
| Retired farmer          |                 |             |             |             |             |             |             |             |             |             |             |             |             |             |
| New England.....        | 3               | 6           | 7           | 7           | 4           | 5           | 6           | 4           | 3           | 5           | 4           | 2           | 2           | 3           |
| Middle Atlantic.....    | 4               | 7           | 5           | 5           | 5           | 4           | 7           | 3           | 6           | 5           | 5           | 3           | 2           | 2           |
| East North Central..... | 5               | 7           | 7           | 7           | 6           | 5           | 6           | 5           | 5           | 4           | 4           | 5           | 4           | 4           |
| West North Central..... | 5               | 8           | 8           | 9           | 6           | 6           | 7           | 6           | 6           | 5           | 4           | 5           | 5           | 5           |
| South Atlantic.....     | 3               | 5           | 4           | 4           | 4           | 3           | 3           | 4           | 3           | 2           | 2           | 2           | 1           | 2           |
| East South Central..... | 2               | 3           | 4           | 3           | 3           | 3           | 3           | 6           | 2           | 3           | 2           | 3           | 3           | 3           |
| West South Central..... | 4               | 6           | 5           | 6           | 7           | 5           | 4           | 4           | 4           | 3           | 5           | 3           | 3           | 2           |
| Mountain.....           | 2               | 4           | 5           | 2           | 4           | 1           | 4           | 2           | 3           | 4           | 2           | 3           | 3           | 2           |
| Pacific.....            | 4               | 4           | 6           | 6           | 7           | 4           | 4           | 7           | 3           | 4           | 3           | 4           | 5           | 2           |
| United States.....      | 4               | 6           | 6           | 6           | 6           | 5           | 5           | 5           | 4           | 4           | 4           | 4           | 3           | 3           |
| Other occupation        |                 |             |             |             |             |             |             |             |             |             |             |             |             |             |
| New England.....        | 38              | 52          | 56          | 53          | 54          | 55          | 48          | 61          | 58          | 55          | 50          | 62          | 68          | 57          |
| Middle Atlantic.....    | 41              | 43          | 50          | 53          | 48          | 45          | 42          | 53          | 50          | 50          | 47          | 47          | 54          | 53          |
| East North Central..... | 27              | 33          | 38          | 45          | 39          | 35          | 36          | 35          | 32          | 30          | 32          | 34          | 38          | 36          |
| West North Central..... | 14              | 17          | 25          | 33          | 29          | 25          | 24          | 27          | 28          | 24          | 18          | 16          | 23          | 22          |
| South Atlantic.....     | 30              | 33          | 41          | 42          | 37          | 37          | 32          | 30          | 37          | 33          | 31          | 36          | 41          | 39          |
| East South Central..... | 23              | 28          | 31          | 31          | 28          | 26          | 26          | 23          | 24          | 23          | 26          | 27          | 27          | 24          |
| West South Central..... | 26              | 30          | 42          | 45          | 39          | 34          | 34          | 33          | 33          | 28          | 26          | 25          | 29          | 32          |
| Mountain.....           | 15              | 20          | 28          | 30          | 26          | 22          | 19          | 23          | 18          | 19          | 18          | 19          | 20          | 23          |
| Pacific.....            | 26              | 31          | 43          | 42          | 39          | 34          | 34          | 30          | 49          | 33          | 33          | 40          | 40          | 41          |
| United States.....      | 24              | 29          | 37          | 41          | 36          | 32          | 31          | 32          | 34          | 30          | 28          | 29          | 34          | 33          |

Active farmers increased substantially in relative importance as sellers of farm real estate during the last year and, for the country as a whole, now constitute the largest seller group. Dealer correspondents reported active farmers as sellers in approximately 38 percent of the voluntary sales in 1942-43, compared with approximately 32 percent for the preceding year. Information collected in sample counties also indicated a substantial increase in the proportion of sales by active farmers.

The West North Central geographic division is the only group of States where sales by former lenders exceeded those by active farmers. Even in this region active farmers were reported as sellers in approximately one-fifth of all voluntary transfers.

The increase in relative importance of active farmers as sellers was due in part to reductions in sales by former lenders, whose holdings have been rapidly depleted in recent years. Real estate dealers in practically all areas reported that credit agencies have now disposed of most of the farms they acquired through mortgage foreclosure or assignment. Reports from the Farm Credit Administration indicate that sales of farms by the Federal land banks and the Federal Farm Mortgage Corporation in 1942 were 15 percent below the number sold in 1941.

### DOWNWARD TREND IN FARM REAL ESTATE FORECLOSURES CONTINUES

The year ended March 15, 1943, brought a further decline in the number of farms transferred by foreclosure of mortgage, by bankruptcy, or by other methods arising out of difficulty in meeting payments on indebtedness secured by farm real estate. The number of such transfers declined from approximately 6.2 per thousand of all farms for the United States as a whole to 4.4 (table 11). The record high for the number of forced sales of this type was 38.8 per thousand for the year 1932-33; in each year since that time a decrease has been reported. The number of such forced sales during the last year was lower than for any year since 1920 (fig. 7).

Substantial declines in the number of foreclosure sales and related defaults were reported from each geographic division. The West North Central group of States continued to report the largest number of such transfers, but the rate of decrease in these States was about the same as for the country as a whole. During the last year, only 5 States reported an increase in the number of foreclosure sales over the preceding year. In several of these States, border-line loans which had been carried along for a number of years were being foreclosed. With the disposal of these cases and with increased farm incomes, even further decreases in the number of distress sales can be expected.

During the calendar year 1942, the Federal land banks acquired the smallest number of farms for any year since 1929 and approximately 29 percent below the previous year.<sup>7</sup> Acquisitions by the Federal Farm Mortgage Corporation in 1942 were only slightly below 1941; however, a substantial decline was reported in the number of reamortizations, extensions, and other forbearance agreements granted to borrowers. The number of acquisitions by the joint stock

<sup>7</sup> U. S. Farm Credit Admin. Ann. Rpts. 1933-42 (1-10). See Ann. Rpt., 1942 (10).

land banks in 1942 was approximately two-fifths of the 1941 number.

Sales resulting from nonpayment of taxes decreased further during the last year, reaching a level lower than at any time since data became available in 1926. For the year ended March 15, 1943, the frequency of such sales for the United States as a whole was 2.2 per thousand of all farms compared with 3.1 the previous year and a peak of 15.3 in 1933.

### LAND HOLDINGS OF PRINCIPAL LENDING AGENCIES REDUCED

Further reduction in the land holdings of principal lending agencies occurred during 1942 as a result of the active selling and further substantial decreases in acquisitions. Creditor-agency holdings of land have been reduced to such levels that in most areas their influence on the land market is now of minor importance. However, in the extreme western Corn Belt and immediately adjacent areas former lenders still have a significant amount of land for sale. Active sales policies were followed by many lending agencies desiring to liquidate their land holdings, but reports indicate that some agencies have substantially advanced asking prices for the farms remaining in their possession.

Farm real estate holdings of the Federal land banks were considerably reduced during 1942. These banks acquired 3,480 farms during the year, the smallest number acquired in any year since 1929. At the end of 1942 the Federal land banks owned 8,339 properties as compared with 14,608 at the end of 1941. The number of properties sold in 1942 was 9,693, about 16 percent less than in the preceding year. However, the ratio of farms sold to properties available for sale was substantially higher in 1942 than in preceding years. During 1942, the St. Paul Land Bank disposed of more than 3,600 whole farms; 2,700 farms were sold by the Omaha Bank, and 1,300 by the Wichita Bank.

The Federal Farm Mortgage Corporation also reduced its farm real estate holdings during 1942. At the end of the year, 4,057 farms and sheriffs' certificates were owned as compared with 5,204 a year earlier. Although the number of farms sold by the Corporation (plus redemptions) declined from 4,464 whole farms and 399 parts of farms sold or redeemed during 1941 to 3,889 whole farms and 325 parts of farms during 1942, the number sold or redeemed in proportion to the total number of farms available for sale increased 7.3 percent. Total sales as a percentage of farms available for sale was 60.9 percent for 1942 as compared to 53.6 percent for 1941. Joint stock land banks sold or otherwise disposed of approximately 1,000 whole farms in 1942, as compared with approximately 1,600 in 1941.

The combined investment in acquired farm real estate held by the Federal land banks and the Federal Farm Mortgage Corporation decreased approximately 40 percent during 1942. Their investment was approximately \$54,757,000 on January 1, 1943, as compared with \$91,816,000 a year earlier. The investment in acquired farm real estate held by selected lending agencies is shown in table 13. For each of these groups of lending agencies, the estimated investment in acquired farm real estate on January 1, 1943 was substantially below that of a year earlier.

Life insurance companies continued to hold more farm real estate than any other credit-agency group, although during 1942 they reduced their investment in such holdings by approximately one-fifth. The estimated investment of life insurance companies in acquired farm real estate includes book value of sales contracts and hence overstates the investment available for liquidation through sale of farm real estate. Complete data are not available as to the amount of these contracts, but information from some of the larger insurance companies indicates that on January 1, 1943, about one-third of their investment in farm real estate holdings consisted of principal remaining unpaid on sale contracts.

TABLE 13.—*Estimated investment in acquired farm real estate held by selected lending agencies, January 1, 1930-43*

| Year      | Federal land banks and Federal Farm Mortgage Corporation <sup>1</sup> | Life insurance companies <sup>2</sup> | Joint stock land banks <sup>3</sup> | Insured commercial banks <sup>4</sup> | 3 State credit agencies <sup>5</sup> |
|-----------|-----------------------------------------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|--------------------------------------|
|           | 1,000 dol.                                                            | 1,000 dol.                            | 1,000 dol.                          | 1,000 dol.                            | 1,000 dol.                           |
| 1930..... | 29,517                                                                | 120,020                               | 19,685                              | ( <sup>6</sup> )                      | 26,860                               |
| 1931..... | 36,865                                                                | 151,229                               | 22,202                              | ( <sup>6</sup> )                      | 33,511                               |
| 1932..... | 53,588                                                                | 219,947                               | 37,957                              | ( <sup>6</sup> )                      | 39,008                               |
| 1933..... | 83,158                                                                | 316,931                               | 71,741                              | ( <sup>6</sup> )                      | 47,454                               |
| 1934..... | 96,632                                                                | 465,072                               | 85,740                              | ( <sup>6</sup> )                      | 56,094                               |
| 1935..... | 96,666                                                                | 600,873                               | 81,700                              | ( <sup>6</sup> )                      | 60,270                               |
| 1936..... | 119,864                                                               | 646,280                               | 78,204                              | <sup>7</sup> 74,166                   | 61,531                               |
| 1937..... | 134,754                                                               | 713,166                               | 72,781                              | 69,525                                | 68,444                               |
| 1938..... | 132,038                                                               | 705,207                               | 62,030                              | 56,311                                | 72,040                               |
| 1939..... | 139,229                                                               | 702,861                               | 53,885                              | 49,143                                | 71,846                               |
| 1940..... | 155,237                                                               | 700,530                               | 46,827                              | 42,045                                | 68,324                               |
| 1941..... | 134,180                                                               | 673,600                               | 36,172                              | 33,373                                | 60,900                               |
| 1942..... | 91,816                                                                | 597,796                               | 25,130                              | 22,841                                | 53,498                               |
| 1943..... | 54,757                                                                | 487,731                               | 18,306                              | <sup>8</sup> 19,532                   | 44,145                               |

<sup>1</sup> Investment, including sheriffs' certificates and judgments, excluding prior liens. Excluding Puerto Rico.

<sup>2</sup> Book value—partially estimated. Includes the book value of sales contracts held.

<sup>3</sup> Carrying value of real estate, including sheriffs' certificates and judgments. Real estate held by banks in receivership included at book value.

<sup>4</sup> Book value.

<sup>5</sup> Investment. Department of Rural Credit of Minnesota, Bank of North Dakota, and Rural Credit Board of South Dakota.

<sup>6</sup> Data unavailable.

<sup>7</sup> June 30.

<sup>8</sup> June 30, 1942.

Compiled from Agr. Finance Rev.

Further reduction in the farm real estate holdings of former lenders may be expected with the continuation of the currently active farm real estate market and the sharply reduced rate of acquisitions. The continuation of relatively high prices for farm products with unusually high income levels has so far tended to prevent reacquirements of farms sold under large purchase-money mortgages and sales contracts. If farm incomes remain high for a sufficient period to allow for a substantial reduction in such contractual obligations, there is likely to be little difficulty with sales of this type. Similar future transactions near the end of the wartime price period may create acute problems.

## FARM-MORTGAGE CREDIT AND DEBT

Agricultural credit conditions during 1942 were such as to support increasing farm real estate values and the large volume of voluntary transfers. Expanded farm incomes were being used for loan repay-

ments and although new farm-mortgage loans were actively being sought by lending agencies, principal repayments during the last year exceeded the amount of new loans closed. Interest rates on farm mortgages continued at low levels with a number of individual insurance companies reporting new low rates for most areas.

### INTEREST RATES AND MORTGAGE RECORDINGS

The Federal land banks continued to offer farm-mortgage credit through unimpaired national farm loan associations at a contract rate of 4 percent and Land Bank Commissioner loan contracts continued at 5 percent. However, Congress continued until July, 1944, the temporary rate of  $3\frac{1}{2}$  percent for most land bank and Land Bank Commissioner loans and provided for a 4-percent rate for purchase-money mortgages and real estate sales contracts. The 4-percent rate for these latter loans and contracts for the Land Bank Commissioner represents a reduced rate from that in effect before July 1942.

Farmers have been affected by these reduced interest rates in several ways. Those having land bank or Land Bank Commissioner loans have benefited directly from lower interest costs. Then it is probable that the continuation of the reduced rates has tended to lower the rates charged by other lenders, especially in those areas in which there has been effective competition. Thus, indirectly, the rate reductions of the Federally sponsored agencies may have tended to reduce the rates charged farm borrowers in general. The lower interest charges have improved the financial position of indebted farmers, which has been particularly significant in the case of buyers who have acquired only a small equity and where interest charges constitute a large proportion of total costs.

The effect of the low rates on values and transfer frequencies has probably been chiefly to induce more buyers to enter the market and to offer higher bids in view of the lower ownership costs. Possibly some buyers decided to purchase land sooner than they otherwise would have done in order to take advantage of the low rates. With the increasing use of long-term mortgages, the advantages of financing at low rates are increased. To the extent that these lower rates are being capitalized into higher land values, the benefits accrue largely to present owners.

Although the volume of voluntary sales during the last year was higher than for any year since immediately after World War I, data on farm-mortgage recordings during 1942 indicate a substantial decrease in the demand for farm-mortgage loans. The total farm-mortgage recordings of all lenders for 1942 is estimated at \$762,772,000 as compared with \$833,996,000 for 1941. This decrease of 9 percent was the first to occur since 1938, when the estimated amount recorded was \$723,200,000. As these recordings include renewals and refinancing of existing mortgages, they do not represent net additions to mortgage debt. Rather, they are indicative of the volume of new mortgage credit currently made available to borrowers.

The decreased demand for farm-mortgage loans during the last year was also reflected in the smaller number of applications for loans received by the Federal land banks and the Land Bank Commissioner. During 1942, these lending agencies received about 30 percent fewer loan applications than in 1941. The average size of loans applied

for was somewhat larger, so the total amount applied for was 27 percent less than in the previous year. Loans closed by the Federal land banks and Land Bank Commissioner in 1942 amounted to \$81,800,000, a decrease of about 20 percent from the total for 1941. Approximately two-thirds of this amount represented loans closed by the Federal land banks.

The estimated amount of farm-mortgage recordings of the lending agencies, other than those which are Federally sponsored, was \$680,972,000 for 1942 compared with \$731,963,000 for 1941. Although this 7-percent decline is indicative of the decreased demand for farm-mortgage credit, these lenders increased in relative importance. During 1942, the estimated amount of their recordings was a larger proportion of total recordings than for any year since the beginning of the series in 1934.

The increased importance of private lenders in the farm-mortgage field reflects the improved position of farm real estate as security for mortgage loans and limited investment alternatives. Farm-mortgage recordings of insurance companies in 1942 are estimated at \$154,566,000 and, except for the estimate of \$160,469,000 for 1941, are larger than in any year since the beginning of the series in 1934. Recordings of individuals in 1942 are estimated at \$248,700,000, a slight increase from the preceding year and higher than any year since 1937. Commercial bank recordings of farm mortgages decreased from about \$221,300,000 in 1941 to \$191,000,000 in 1942, which is lower than any year since 1936.

For the group of surveyed counties, 45 percent of the transfers in 1942 were cash sales, compared with 48 percent in 1941. Comparable data for earlier years are not available, but informed persons generally indicate that these proportions are higher than have prevailed for some time. For those sales involving mortgages, and for which information on terms of financing was available, 33 percent of the purchase price was paid in cash in 1942 as compared with 32 percent in 1941. Data for the first quarter of 1943 indicate that cash in mortgaged transfers has increased to 38 percent. Even though the ratio of cash down payment to purchase price is increasing, the increase is frequently not sufficient to offset higher sales prices. As a result, in many areas, the size of mortgages in credit-financed sales is moving upward.

### FARM-MORTGAGE DEBT REDUCED

Total farm-mortgage debt has continued to decrease and at the beginning of 1943 was lower than at any other time since 1917. The estimated farm-mortgage indebtedness for January 1, 1943, is \$6,350,263,000, a decrease of about \$363,572,000, or approximately 5.4 percent, from the estimate of \$6,713,835,000 for January 1, 1942 (table 14). The \$363,572,000 reduction during 1942 is the largest for any year since 1933 when the total farm-mortgage debt decreased about \$750,000,000. The debt reduction in 1933 was due largely to foreclosure and related distress transfers, whereas during 1942 such transfers were relatively infrequent and the debt reduction resulted from cash principal repayments exceeding the amount of new loans.

TABLE 14.—Farm-mortgage debt: Total outstanding and amounts held by selected lending agencies, United States, Jan. 1, 1910, 1915, 1920, 1925, 1930-43 <sup>1</sup>

| Beginning of year— | Total farm-mortgage debt | Amounts held by selected lending agencies     |                                     |                                       |                               |                                          |                                                      |                                    |
|--------------------|--------------------------|-----------------------------------------------|-------------------------------------|---------------------------------------|-------------------------------|------------------------------------------|------------------------------------------------------|------------------------------------|
|                    |                          | Federal land banks and Land Bank Commissioner | Joint stock land banks <sup>2</sup> | Life insurance companies <sup>3</sup> | Commercial banks <sup>4</sup> | Three State credit agencies <sup>5</sup> | Farm Security Administration                         |                                    |
|                    |                          |                                               |                                     |                                       |                               |                                          | Construction and farm development loans <sup>6</sup> | Tenant-purchase loans <sup>7</sup> |
|                    | 1,000 dol.               | 1,000 dol.                                    | 1,000 dol.                          | 1,000 dol.                            | 1,000 dol.                    | 1,000 dol.                               | 1,000 dol.                                           | 1,000 dol.                         |
| 1910.....          | 3,207,863                |                                               |                                     | 386,961                               | 406,248                       |                                          |                                                      |                                    |
| 1915.....          | 4,990,785                |                                               |                                     | 669,984                               | 746,111                       |                                          |                                                      |                                    |
| 1920.....          | 8,448,772                | 296,386                                       | 60,038                              | 974,826                               | 1,204,383                     | ( <sup>8</sup> )                         |                                                      |                                    |
| 1925.....          | 9,912,650                | 923,077                                       | 446,429                             | 1,942,624                             | 1,200,456                     | ( <sup>8</sup> )                         |                                                      |                                    |
| 1930.....          | 9,630,768                | 1,185,765                                     | 626,980                             | 2,105,477                             | 997,468                       | 93,274                                   |                                                      |                                    |
| 1931.....          | 9,458,281                | 1,175,832                                     | 590,811                             | 2,059,221                             | 946,876                       | 92,698                                   |                                                      |                                    |
| 1932.....          | 9,214,004                | 1,151,659                                     | 536,644                             | 2,007,361                             | 940,135                       | 93,014                                   |                                                      |                                    |
| 1933.....          | 8,638,383                | 1,105,610                                     | 459,183                             | 1,869,160                             | 889,083                       | 84,075                                   |                                                      |                                    |
| 1934.....          | 7,887,119                | 1,273,831                                     | 392,438                             | 1,661,046                             | 710,863                       | 79,574                                   |                                                      |                                    |
| 1935.....          | 7,785,971                | 2,501,824                                     | 255,931                             | 1,258,900                             | 498,842                       | 62,286                                   |                                                      |                                    |
| 1936.....          | 7,638,867                | 2,858,966                                     | 175,677                             | 1,054,770                             | 487,505                       | 48,091                                   |                                                      |                                    |
| 1937.....          | 7,389,797                | 2,888,912                                     | 133,499                             | 936,454                               | 487,534                       | 32,657                                   |                                                      |                                    |
| 1938.....          | 7,214,138                | 2,835,962                                     | 104,163                             | 895,470                               | 501,450                       | 24,657                                   | 3,615                                                | 0                                  |
| 1939.....          | 7,070,896                | 2,723,022                                     | 87,362                              | 887,336                               | 519,276                       | 17,281                                   | 6,220                                                | 8,949                              |
| 1940.....          | 6,909,794                | 2,583,901                                     | 65,719                              | 883,414                               | 534,170                       | 14,823                                   | 6,353                                                | 32,212                             |
| 1941.....          | 6,824,126                | 2,488,232                                     | 48,766                              | 890,516                               | 543,408                       | 12,380                                   | 7,470                                                | 65,624                             |
| 1942.....          | <sup>9</sup> 6,713,835   | 2,350,346                                     | 33,441                              | <sup>9</sup> 907,141                  | 535,212                       | 12,113                                   | 9,240                                                | 112,864                            |
| 1943.....          | <sup>10</sup> 6,350,263  | 2,104,632                                     | 21,087                              | 891,441                               | 476,676                       | 11,181                                   | 12,580                                               | 151,100                            |

<sup>1</sup> Excluding possessions.<sup>2</sup> Including banks in receivership.<sup>3</sup> Estimates based upon direct reports from life insurance companies, official reports submitted to the insurance commissioners of the various States and the District of Columbia, and Best's Life Insurance Reports.<sup>4</sup> 1935-43 insured commercial banks; before 1935 all open State and national banks.<sup>5</sup> Rural Credit Board of South Dakota, Bank of North Dakota, and Department of Rural Credit of Minnesota.<sup>6</sup> Before 1941, data for loans for construction of farmstead improvements; 1941 to 1943 includes in addition special real estate (farm development) loans, including loans made from State corporation trust funds; before 1941 special real estate loans were of minor importance.<sup>7</sup> Includes loans made from State corporation trust funds.<sup>8</sup> Data not available.<sup>9</sup> Revised.<sup>10</sup> Preliminary.

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The Farm Credit Administration reported that farmers repaid over \$303,000,000 on their Federal land bank and Land Bank Commissioner loans during 1942 compared with \$205,000,000 in 1941. For these two lending agencies, repayments in 1942 were more than 3½ times the total amount of new loans closed during the year. As a part of the loans paid represent loans refinanced with other lenders, to this extent such payments do not constitute reductions in total mortgage debt. Amounts paid into future payment funds with the Federal land banks and the Land Bank Commissioner during 1942 were sharply higher than in the previous year and the total accumulations at the end of the year amounted to more than \$17,700,000, an increase of over \$15,100,000 during 1942. The combined farm-mortgage holdings of the Federal land banks and the Land Bank Commissioner amounted to \$2,104,632,000 on January 1, 1943, a reduction of about 10 percent from the preceding year. These two agencies held 33.1 percent of the estimated total farm-mortgage debt at the beginning of 1943, compared with 35.0 percent on January 1, 1942.

The total investment of life insurance companies in farm mortgages decreased only slightly during 1942, for repayments of principal were

practically offset by new loans. These companies held farm-mortgage loans totaling \$891,441,000 (exclusive of sales contracts) on January 1, 1943, as compared with \$907,141,000 a year earlier. Farm-mortgage holdings of life insurance companies at the beginning of 1943 constituted 14 percent of the total farm-mortgage debt, a slight increase over the percentage held a year earlier.

For the second consecutive year the farm-mortgage investments of commercial banks decreased, after having increased during each year from 1936 to 1940. The slight decrease in 1941 was followed by a further 10.9 percent decrease in 1942, bringing their holdings to \$476,676,000, the lowest since before World War I.

The Farm Security Administration held about 3 percent of the total farm-mortgage debt on January 1, 1943, in the form of tenant-purchase or other real-estate loans. The total amount of these loans at the beginning of 1943 was \$163,680,000, as compared with \$122,104,000 a year earlier.

The remainder of the farm-mortgage debt, held by individuals and miscellaneous lenders, amounted to about \$2,714,000,000 as of January 1, 1943, indicating a decrease of approximately 3 percent during 1942.

Although the 5.4 percent reduction in the total farm-mortgage debt during 1942 means that many farmers have improved their debt status, it is significant to note that the average size of the mortgages recorded in 1942 for the United States as a whole was 17 percent larger than in 1940. It is the size of these new mortgages in relation to the earning capacity of the mortgaged farms that will determine whether these borrowers are likely to be in a precarious debt situation if prices return to pre-war levels before substantial principal repayments have been made.

## “WARRANTED VALUES” AND WARTIME MARKET PRICES OF FARM REAL ESTATE

Individual buyers and sellers, lenders, and all persons seriously concerned with public policy and economic stabilization in agriculture, are necessarily interested in appraising current and probable future levels of land values. From many quarters come a variety of questions. Are land values too low? Too high? Is it too late to buy land? Is it too early to sell? How long will land values continue to rise? Will they stay up after the war? What levels of values are economically justifiable now and after the war?

As always in complex economic matters, so many variable influences enter that answers to such questions cannot be made with any degree of assurance. However, a break-down of the questions into their basic elements can clarify the nature of the problems raised and indicate more precisely the essential character of the considerations involved in decisions of farm real estate buyers, sellers, and lenders.

In the first place, it is necessary to distinguish between two reasonably distinct, though related, land-value concepts that are implied in the questions. One concept, which may be termed “market price,” relates primarily to expectations with respect to the current prices and to prices at which land is likely to sell in the relatively near future. The other may be characterized as a “warranted value”

concept, with attention centering largely upon expected longer-run earning capacity and the land-value levels that may reasonably be supported or maintained by such earnings. "Normal value," "basic value," and "income value" are other terms that have a general connotation similar to warranted value, for in each emphasis is placed on land values based on long-term income expectations.

Buyers and sellers of farm real estate as well as those extending credit give consideration to both market prices and warranted values, but the emphasis placed upon one as against the other varies widely among the different groups participating in the land market.

At one extreme are those primarily interested in profits from the resale of property. Their principal interest is to buy on a rising market and sell before prices drop. Probabilities for capital gain largely obscure income considerations. This group is interested in the market price-warranted value relationship only to the extent that risks and prospective profits are affected. At the other extreme are farmers purchasing for operation and agencies extending credit secured by farm real estate, for whom primary interest centers in value levels justified by expected earnings. Current market prices are significant only insofar as they permit purchase by an operator at levels not in excess of those that can reasonably be supported by expected income, or insofar as they affect the liquidation value of security upon which credit is extended. Between these two groups are various prospective sellers and investor groups, whose interests are usually more equally divided between current sales prices and longer-term values. On the one hand, such groups are keenly interested in current market developments in establishing asking prices and in timing purchases or sales. On the other hand, owners are not likely to sell, or investors to buy, unless such action appears to them justified by prevailing and expected market-price and warranted-value relationships.

The capitalization or discount of expected return is the solid logical basis for economic valuation of farm real estate. The elements involved in the determination of warranted values through such an approach may be summarized under two chief factors. The first is the size and shape of the stream of future income attributable to the land. (What will the net returns be, from here on out?) The second is the rate of discount used in translating expected future income into present capital value. (In effect, what is an acceptable *rate of return on investment in farm land*?)

An example will serve to clarify this process and its significance in land valuation. Assuming a net rent per acre in each of the years 1935 to 1940 of \$5 (expected, during that period, to continue indefinitely), an assumed discount rate of 5 percent may be used to translate the future income stream into a capital value of \$100 an acre.<sup>8</sup>

But war conditions have drastically changed farm-income expectations, at least for the immediate future. If from the beginning of 1941, the *expected* rents are those assumed in table 15, what will be the warranted value—at the beginning of 1941 and each of the succeeding years?

In the assumed series, rents are higher during the 7 years 1941 to 1947 than during the years 1935 to 1940, but they return to the 1935-

<sup>8</sup> This is arrived at through applying the familiar formula:  $\frac{a}{r} = \frac{\$5}{0.05} = \$100$ .

40 level in 1948 and continue there indefinitely. Warranted *additional* value in 1941 is, then, simply the present value of annual rents in excess of \$5 (the 1935-40 level) receivable during 1941-47. Warranted *total* value in 1941 is the "base value" (\$100) plus the warranted *additional* value.

TABLE 15.—*Net rent and value per acre of farm real estate, 1935, and future years*<sup>1</sup>

[Hypothetical projection I]

| Year    | Net rent       | Capitalized current rent | Warranted value | U. S. index of historical value, Mar. 1 (1935-39=100) | Year    | Net rent       | Capitalized current rent | Warranted value | U. S. index of historical value, Mar. 1 (1935-39=100) |
|---------|----------------|--------------------------|-----------------|-------------------------------------------------------|---------|----------------|--------------------------|-----------------|-------------------------------------------------------|
|         | <i>Dollars</i> | <i>Dollars</i>           | <i>Dollars</i>  | <i>Percent</i>                                        |         | <i>Dollars</i> | <i>Dollars</i>           | <i>Dollars</i>  | <i>Percent</i>                                        |
| 1935... | 5.00           | 100                      | 100             | 95                                                    | 1945... | 10.00          | 200                      | 111             | -----                                                 |
| 1936... | 5.00           | 100                      | 100             | 99                                                    | 1946... | 10.00          | 200                      | 107             | -----                                                 |
| 1937... | 5.00           | 100                      | 100             | 102                                                   | 1947... | 7.50           | 150                      | 102             | -----                                                 |
| 1938... | 5.00           | 100                      | 100             | 103                                                   | 1948... | 5.00           | 100                      | 100             | -----                                                 |
| 1939... | 5.00           | 100                      | 100             | 101                                                   | 1949... | 5.00           | 100                      | 100             | -----                                                 |
| 1940... | 5.00           | 100                      | 100             | 102                                                   | 1950... | 5.00           | 100                      | 100             | -----                                                 |
| 1941... | 7.50           | 150                      | 125             | 103                                                   | 1951... | 5.00           | 100                      | 100             | -----                                                 |
| 1942... | 10.00          | 200                      | 124             | 110                                                   | 1952... | 5.00           | 100                      | 100             | -----                                                 |
| 1943... | 10.00          | 200                      | 120             | 120                                                   |         |                |                          |                 |                                                       |
| 1944... | 10.00          | 200                      | 116             | -----                                                 | n.....  | 5.00           | 100                      | 100             | -----                                                 |

<sup>1</sup> Warranted values as of beginning of year. Rents received at end of year. Discount rate: 5 percent. Assumption is that during 1935-40 the \$5 rent level is expected to continue *indefinitely*, but that from the beginning of 1941 the indicated future rents are expected.

The annual rents in excess of \$5 amount to a total of \$30, but their discounted value as of the beginning of 1941 is only about \$25. The discounted value, at the beginning of 1942, of the additional rents yet to be received is about \$24; at the beginning of 1943, about \$20; and so on. Warranted *total* value at the beginning of any year is the \$100 "base value" plus the discounted value of future rents above \$5. At the beginning of 1948, when the "extra rent period" is past and annual rents are expected to return to \$5 and stay at that level, warranted values are again back at the pre-emergency level of \$100.

Under a given set of assumptions, the determination of warranted values is purely mathematical. It is obvious that the crux of the problem is that of arriving at acceptable land income and interest rates. No one can know with certainty what future rent levels will be. They will depend in the first instance primarily on size of crops, farm commodity prices, and production costs. These three elements in turn will be affected by various other forces, including the weather, shifts and cyclical fluctuations in demand and supply, and inevitable developments in agricultural and industrial technology.

Also highly important for land values as well as for our whole economy in the years ahead will be the social-economic policies of our own and other Governments. Land values will be indirectly but very importantly affected by general Government policies and action with respect to war and armaments; industrial employment, domestic trade, monopoly, and kindred problems; general international trade; and general national and international monetary and credit problems.

Governmental policies that will affect agriculture (and hence land values) more directly include those having to do with crop control, conservation programs, agricultural prices and costs, subsidies, credit, taxes, marketing schemes, nutrition programs, foreign trade in agri-

cultural products, and other elements in our agricultural economy. The net effects on land values will vary from region to region, from State to State, county to county, and even from farm to farm within a relatively small area.

This incomplete recital of some of the things on which the future of farm real estate values will depend must give pause to any ready acceptance of land-value forecasts. Yet, paradoxically, buyers and sellers and borrowers and lenders every day are "predicting"—or at least "gambling on"—what land rents and values will be in the future. These considerations suggest that one of the principal advantages of an income capitalization approach to values is in more clearly portraying the nature of the essential predictions that are inherent in transferring title to land or in borrowing or lending on land.

Unfortunately, many who borrow and buy land, especially on a rising market like the present, do not realize the true meaning of their actions. They are "betting," possibly only hoping, that they will "come out" in the long run. Probably most buyers up to now will be able to come out all right—on the basis of apparently reasonable expectations of high incomes for the next 2 or 3 years.

But if prices of farm land should continue to rise markedly, the higher value levels could be justified in most areas only if farm returns and rents should continue at or above present levels for more than 3 or possibly 4 years. Here is the nature of the gamble that farmers and investors in most regions will be taking if they buy farm land at prices substantially higher than those now prevailing.

In terms of figure 9, such buyers would be getting up into the lighter (watered value) parts of the "value" bars—assuming the rent levels used in the earlier example and indicated in the lower section of the chart. The actions of these buyers might be explainable in several ways.

(1) They might believe that future rents will be higher than those assumed in the example.

(2) They might be willing to capitalize future rents at a rate lower than the 5 percent in the example. That would mean getting a lower rate of return on investment. (In actual situations some buyers would want to use a capitalization rate considerably higher than 5 percent in order to allow for special costs, risks, and uncertainties and also to permit some amortization of loan principal from land income.)

(3) As inflation hedgers, they might be willing to risk getting a low positive, or even a large "negative," rate of return—in view of the possibility that money rents and money values of land could rise substantially if a general inflation occurred.

(4) As short-run speculators, they might be thinking entirely in terms of holding for a short while and "getting out before the crash."

(5) They simply might not know what they're doing. Dazzled by current high farm prices and returns, and having money in the bank plus access to easy credit, many might plump almost blindly into the purchase of high-priced land.

Calculated actions falling under (1) through (4) may make sense from the point of view of the individual, though they may not always make social sense. Obviously, the type of uncalculated action falling under (5) makes little sense of any sort.

Alternative series of warranted land values may of course be projected on the bases of other sets of assumptions regarding future rents. One such alternative projection (fig. 10-II) has been made on the assumption that the time pattern of rents during the next 20 years will be similar to that of the two decades following 1918, with the exception that 2 additional peak-rent war years have been inserted into the series. In this projection, capitalized current rents rise from 1940 to 1944; but warranted values fall from a 1941 high of \$138 to

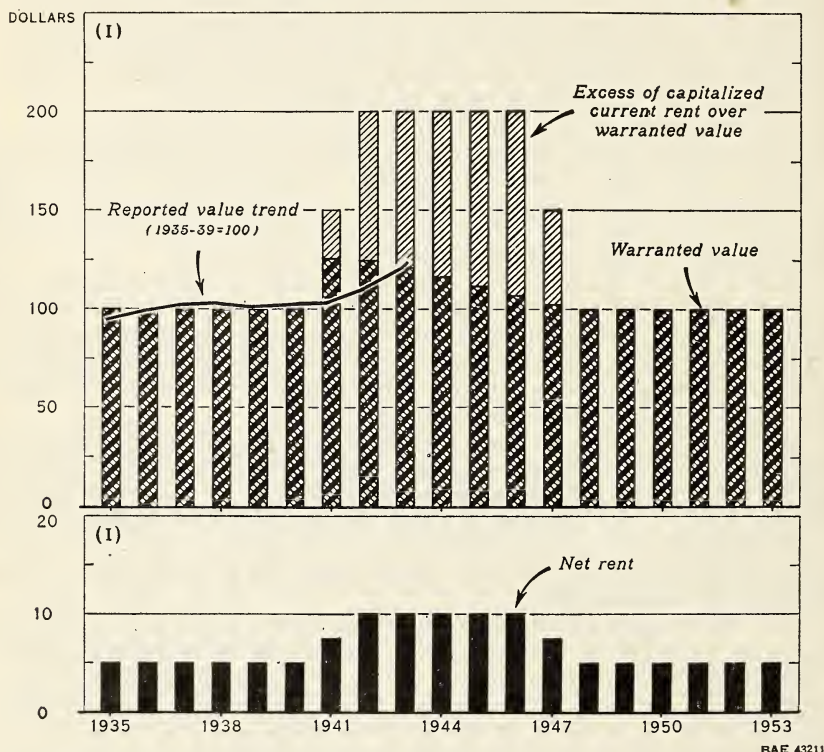
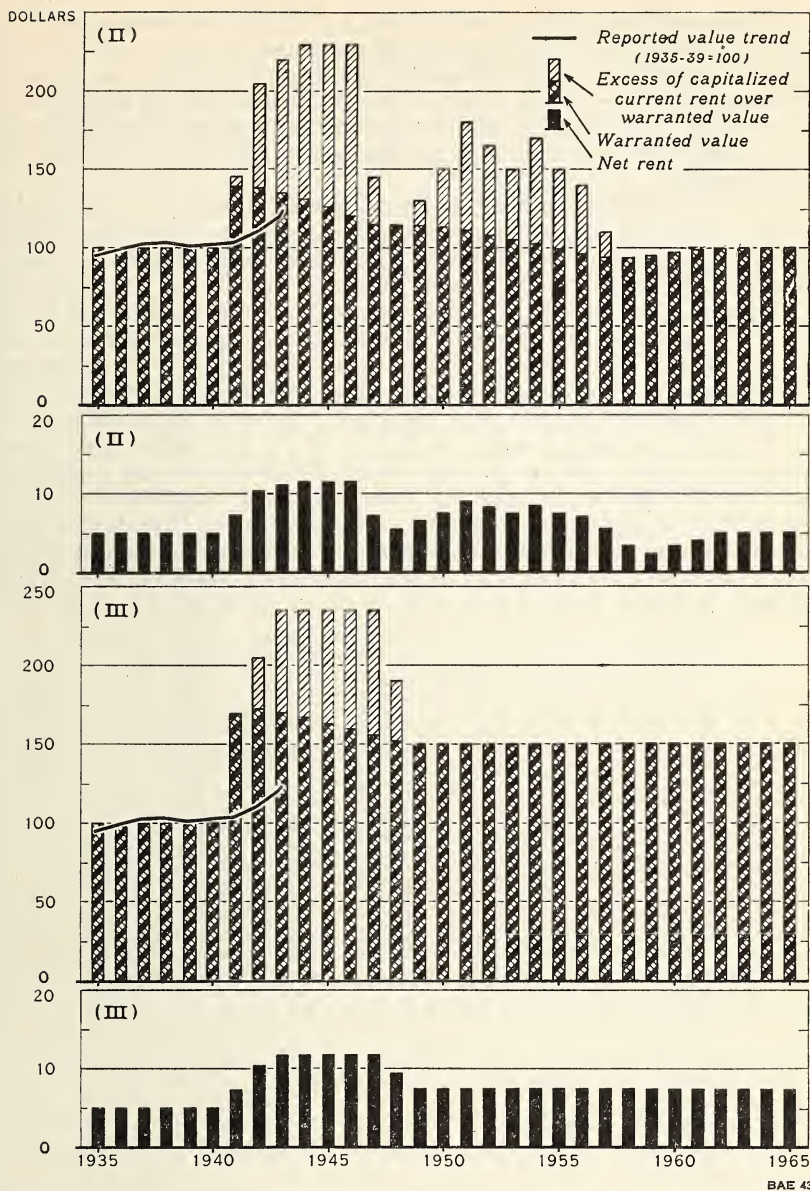


FIGURE 9.—NET RENT AND VALUE PER ACRE OF FARM REAL ESTATE, UNITED STATES, 1935-53.

(Hypothetical projection I)

On the basis of the assumed future rents (\$5 after 1953), average land values on July 1, 1943, were slightly above warranted values.

\$135 in 1943, \$131 in 1944, and continuously thereafter to a low of \$94 in 1958. The movement of reported average values, measured from a 1935-39 base, indicates that the market value on March 1, 1943, corresponding to the warranted value of \$135, is \$120. However, if market value moves upward from 1943 to 1944 at the 1918-19 rate, market value in March 1944 would equal warranted value. On the further assumption that the 1944-45 rate of value increase would equal that of 1919-20, market values in March 1945 would be up to \$159 as compared to a warranted value of \$126. Such a development would mean land-value inflation accomplished.



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FIGURE 10.—NET RENT AND VALUE PER ACRE OF FARM REAL ESTATE, UNITED STATES, 1935-65.

(Hypothetical projections II and III)

In projection II (pattern of future rents assumed to repeat that following World War I, with 2 additional peak-rent war years inserted), warranted values at the beginning of 1944 are only slightly above average values reported for July 1, 1943. In III, where rents in 1949 and following years are assumed to be 50 percent greater than those of 1935-40, warranted value is considerably in excess of July 1, 1943, reported average value.

For another alternative projection (fig. 10-III) it is assumed that 1943 net rents will be 15 percent above those of 1942 and that the assumed 1943 level will be maintained through 1947, after which a "permanent" post-war level 50 percent above the 1935-39 average will be reached in 1949. *On this assumption of maintained inflation*, a post-war level of land values 50 percent above the 1935-39 level would be warranted.

Most actions likely to result in carrying wartime prices of land above levels warranted by any reasonable long-term income expectations probably derive from the propensity of buyers and sellers to be unduly influenced by current temporary prices in the formulation of their value judgments. A calculation of warranted values during the World War I period, based largely upon the net rents experienced since that time, indicates that market values were about equal to warranted values in 1917. However, market values continued to increase until 1920, whereas warranted values declined. As a result, market values in 1920 were approximately two-thirds above the value levels warranted by rents that have since been received or are receivable assuming a repetition of past patterns. It is the danger of a repetition of such a significant departure of market prices from levels probably warranted that provides the primary justification for emergency land-market control programs in the interests of stabilization of land values.

TABLE 16.—Farm real estate: Index numbers of estimated value per acre, by geographic divisions and States, 1912-43<sup>1</sup>

[1935-39=100]

| Geographic division and State | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| United States.....            | 117  | 121  | 124  | 124  | 131  | 142  | 156  | 169  | 205  | 190  | 168  | 163  | 157  | 153  | 150  | 144  | 142  | 140  | 138  | 128  | 107  | 88   | 92   | 95   | 99   | 102  | 103  | 101  | 102  | 103  | 110  | 120  |
| Geographic divisions:         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| New England:                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Middle Atlantic.....          | 94   | 96   | 95   | 94   | 97   | 106  | 111  | 117  | 133  | 128  | 127  | 123  | 122  | 121  | 122  | 121  | 121  | 120  | 121  | 119  | 111  | 100  | 99   | 99   | 100  | 101  | 100  | 100  | 101  | 101  | 104  | 106  |
| East North Central.....       | 111  | 135  | 115  | 113  | 117  | 126  | 132  | 137  | 134  | 134  | 134  | 132  | 129  | 128  | 126  | 124  | 123  | 120  | 114  | 98   | 83   | 88   | 93   | 94   | 96   | 100  | 101  | 102  | 101  | 102  | 107  | 117  |
| West North Central.....       | 131  | 135  | 139  | 140  | 148  | 157  | 171  | 182  | 212  | 204  | 177  | 172  | 166  | 162  | 161  | 157  | 140  | 117  | 92   | 96   | 98   | 102  | 103  | 101  | 97   | 103  | 105  | 104  | 107  | 120  | 129  | 129  |
| South Atlantic.....           | 140  | 144  | 148  | 151  | 165  | 176  | 193  | 212  | 265  | 251  | 216  | 205  | 190  | 181  | 175  | 166  | 162  | 161  | 157  | 140  | 117  | 92   | 96   | 98   | 102  | 103  | 101  | 97   | 94   | 93   | 99   | 110  |
| West Atlantic.....            | 96   | 98   | 101  | 97   | 107  | 117  | 133  | 158  | 196  | 172  | 144  | 150  | 147  | 135  | 132  | 130  | 127  | 114  | 95   | 79   | 86   | 92   | 96   | 98   | 102  | 103  | 105  | 105  | 108  | 115  | 125  | 125  |
| East South Central.....       | 96   | 99   | 102  | 98   | 108  | 119  | 138  | 161  | 197  | 147  | 148  | 141  | 139  | 137  | 132  | 129  | 127  | 126  | 115  | 96   | 78   | 84   | 92   | 95   | 99   | 100  | 104  | 107  | 110  | 114  | 125  | 139  |
| West South Central.....       | 100  | 105  | 109  | 105  | 108  | 122  | 141  | 150  | 186  | 166  | 143  | 139  | 141  | 151  | 146  | 144  | 143  | 143  | 127  | 112  | 82   | 86   | 92   | 95   | 99   | 100  | 104  | 107  | 110  | 114  | 125  | 139  |
| Mountain.....                 | 133  | 138  | 136  | 133  | 132  | 144  | 158  | 175  | 204  | 180  | 166  | 155  | 149  | 142  | 139  | 137  | 137  | 133  | 136  | 112  | 93   | 94   | 95   | 99   | 102  | 102  | 102  | 102  | 103  | 105  | 113  | 124  |
| Pacific.....                  | 89   | 93   | 100  | 101  | 104  | 115  | 121  | 126  | 146  | 146  | 142  | 139  | 138  | 137  | 135  | 134  | 134  | 133  | 133  | 132  | 111  | 90   | 91   | 95   | 99   | 103  | 103  | 101  | 101  | 102  | 108  | 119  |
| New England:                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Maine.....                    | 105  | 108  | 103  | 101  | 103  | 116  | 121  | 131  | 149  | 139  | 133  | 136  | 133  | 131  | 133  | 131  | 131  | 129  | 131  | 129  | 117  | 99   | 99   | 99   | 100  | 102  | 101  | 99   | 100  | 100  | 102  | 104  |
| New Hampshire.....            | 105  | 109  | 111  | 109  | 107  | 112  | 120  | 126  | 139  | 134  | 136  | 121  | 118  | 120  | 123  | 122  | 122  | 120  | 120  | 119  | 110  | 100  | 98   | 98   | 99   | 101  | 100  | 101  | 102  | 103  | 105  | 108  |
| Vermont.....                  | 101  | 101  | 98   | 103  | 115  | 126  | 132  | 135  | 149  | 150  | 144  | 133  | 129  | 125  | 125  | 123  | 123  | 123  | 121  | 112  | 101  | 99   | 99   | 100  | 100  | 101  | 99   | 99   | 101  | 101  | 101  | 110  |
| Massachusetts.....            | 88   | 89   | 91   | 88   | 89   | 99   | 102  | 107  | 125  | 120  | 119  | 118  | 119  | 117  | 117  | 117  | 117  | 117  | 116  | 108  | 101  | 100  | 99   | 99   | 99   | 100  | 101  | 101  | 101  | 101  | 101  | 103  |
| Rhode Island.....             | 84   | 85   | 84   | 86   | 90   | 95   | 99   | 104  | 110  | 110  | 107  | 105  | 106  | 108  | 109  | 112  | 113  | 113  | 113  | 112  | 107  | 100  | 99   | 99   | 100  | 101  | 100  | 99   | 101  | 102  | 106  | 107  |
| Connecticut.....              | 79   | 80   | 82   | 80   | 82   | 88   | 93   | 97   | 110  | 108  | 112  | 110  | 111  | 111  | 112  | 112  | 112  | 112  | 112  | 107  | 100  | 99   | 99   | 99   | 100  | 101  | 100  | 100  | 100  | 103  | 107  | 108  |
| Middle Atlantic:              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| New York.....                 | 115  | 117  | 119  | 117  | 121  | 128  | 135  | 138  | 156  | 144  | 136  | 134  | 131  | 130  | 128  | 126  | 123  | 122  | 120  | 113  | 107  | 95   | 96   | 98   | 98   | 100  | 101  | 101  | 100  | 100  | 102  | 114  |
| New Jersey.....               | 86   | 87   | 90   | 87   | 90   | 97   | 101  | 104  | 114  | 106  | 101  | 105  | 109  | 113  | 113  | 111  | 110  | 108  | 104  | 97   | 97   | 97   | 97   | 97   | 99   | 100  | 101  | 102  | 102  | 106  | 112  | 119  |
| Pennsylvania.....             | 113  | 115  | 117  | 115  | 121  | 132  | 137  | 143  | 161  | 151  | 138  | 136  | 133  | 132  | 132  | 129  | 127  | 126  | 123  | 117  | 111  | 90   | 90   | 95   | 100  | 101  | 103  | 102  | 104  | 110  | 119  | 119  |
| East North Central:           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Ohio.....                     | 135  | 139  | 140  | 147  | 156  | 164  | 182  | 187  | 219  | 186  | 171  | 168  | 163  | 151  | 145  | 137  | 132  | 130  | 124  | 113  | 97   | 81   | 87   | 91   | 99   | 104  | 102  | 105  | 106  | 111  | 123  | 134  |
| Indiana.....                  | 141  | 146  | 150  | 148  | 161  | 169  | 188  | 197  | 235  | 216  | 175  | 168  | 158  | 149  | 140  | 127  | 122  | 121  | 117  | 105  | 77   | 82   | 89   | 97   | 102  | 106  | 106  | 108  | 111  | 128  | 143  | 143  |
| Illinois.....                 | 142  | 146  | 151  | 150  | 163  | 174  | 190  | 233  | 224  | 185  | 180  | 169  | 168  | 160  | 145  | 140  | 138  | 133  | 118  | 96   | 79   | 86   | 90   | 95   | 103  | 107  | 106  | 110  | 111  | 126  | 133  | 133  |
| Michigan.....                 | 111  | 113  | 116  | 118  | 126  | 136  | 151  | 155  | 175  | 172  | 168  | 164  | 156  | 150  | 146  | 141  | 137  | 130  | 109  | 91   | 93   | 94   | 95   | 104  | 104  | 103  | 106  | 110  | 119  | 130  | 130  | 130  |
| Wisconsin.....                | 113  | 116  | 119  | 121  | 136  | 144  | 155  | 166  | 198  | 196  | 179  | 171  | 162  | 151  | 146  | 142  | 139  | 138  | 136  | 121  | 106  | 93   | 93   | 96   | 98   | 104  | 103  | 100  | 97   | 95   | 102  | 107  |
| West North Central:           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Minnesota.....                | 111  | 117  | 123  | 125  | 142  | 162  | 181  | 195  | 250  | 248  | 219  | 207  | 199  | 186  | 182  | 170  | 164  | 161  | 156  | 136  | 115  | 92   | 97   | 97   | 99   | 101  | 103  | 100  | 100  | 101  | 106  | 117  |
| Iowa.....                     | 134  | 138  | 145  | 155  | 178  | 186  | 202  | 223  | 296  | 273  | 225  | 216  | 198  | 189  | 180  | 167  | 163  | 161  | 156  | 137  | 111  | 81   | 88   | 92   | 101  | 102  | 103  | 103  | 103  | 110  | 121  | 121  |
| Missouri.....                 | 163  | 169  | 175  | 172  | 184  | 195  | 212  | 232  | 292  | 265  | 226  | 216  | 198  | 180  | 176  | 167  | 163  | 161  | 156  | 135  | 113  | 93   | 97   | 98   | 101  | 102  | 101  | 98   | 100  | 102  | 112  | 125  |
| North Dakota.....             | 150  | 155  | 159  | 159  | 173  | 183  | 192  | 202  | 225  | 219  | 211  | 198  | 176  | 169  | 162  | 154  | 151  | 143  | 133  | 102  | 105  | 103  | 103  | 104  | 103  | 104  | 99   | 88   | 80   | 85   | 89   | 89   |
| South Dakota.....             | 185  | 195  | 199  | 195  | 209  | 223  | 244  | 279  | 349  | 334  | 283  | 244  | 226  | 207  | 188  | 185  | 183  | 179  | 159  | 129  | 106  | 106  | 105  | 106  | 105  | 104  | 98   | 85   | 79   | 78   | 81   | 91   |
| Nebraska.....                 | 139  | 142  | 145  | 143  | 147  | 157  | 181  | 206  | 255  | 237  | 205  | 198  | 183  | 176  | 175  | 169  | 167  | 165  | 161  | 150  | 127  | 99   | 102  | 104  | 102  | 102  | 98   | 83   | 78   | 83   | 91   | 91   |
| Kansas.....                   | 133  | 130  | 130  | 135  | 143  | 150  | 161  | 173  | 198  | 195  | 171  | 167  | 155  | 151  | 148  | 149  | 148  | 148  | 143  | 135  | 117  | 92   | 95   | 96   | 99   | 103  | 102  | 100  | 93   | 94   | 98   | 111  |

<sup>1</sup> All farm land with improvements as of Mar. 1. Owing to rounding of figures, 1935-39 will not always equal exactly 100 percent.

TABLE 16.—*Farm real estate: Index numbers of estimated value per acre, by geographic divisions and States, 1912-43—Continued*

| Geographic division and State | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <b>South Atlantic:</b>        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Maryland.....                 | 100  | 103  | 106  | 107  | 112  | 122  | 133  | 140  | 170  | 150  | 145  | 140  | 137  | 135  | 134  | 129  | 127  | 126  | 124  | 109  | 92   | 92   | 94   | 97   | 101  | 104  | 103  | 103  | 103  | 108  | 114  | 128  |
| Delaware.....                 | 116  | 117  | 115  | 117  | 122  | 133  | 144  | 150  | 161  | 149  | 138  | 138  | 124  | 130  | 132  | 129  | 129  | 129  | 125  | 110  | 93   | 93   | 93   | 95   | 98   | 100  | 104  | 103  | 103  | 108  | 112  | 126  |
| Virginia.....                 | 91   | 94   | 97   | 91   | 110  | 117  | 123  | 157  | 177  | 169  | 147  | 160  | 152  | 145  | 130  | 130  | 128  | 128  | 126  | 110  | 83   | 83   | 86   | 91   | 97   | 104  | 105  | 104  | 106  | 108  | 111  | 123  |
| West Virginia.....            | 118  | 121  | 125  | 122  | 126  | 135  | 148  | 164  | 177  | 171  | 151  | 155  | 151  | 145  | 140  | 134  | 132  | 131  | 127  | 119  | 89   | 89   | 93   | 95   | 99   | 100  | 102  | 104  | 104  | 108  | 110  | 120  |
| North Carolina.....           | 76   | 77   | 81   | 80   | 89   | 101  | 118  | 138  | 174  | 153  | 130  | 152  | 149  | 146  | 144  | 139  | 134  | 129  | 123  | 105  | 89   | 67   | 79   | 87   | 93   | 103  | 108  | 107  | 108  | 106  | 117  | 125  |
| South Carolina.....           | 122  | 119  | 122  | 114  | 119  | 130  | 148  | 196  | 278  | 226  | 153  | 156  | 164  | 167  | 143  | 137  | 134  | 133  | 125  | 110  | 88   | 69   | 81   | 92   | 95   | 101  | 106  | 106  | 108  | 115  | 124  | 136  |
| Georgia.....                  | 128  | 132  | 132  | 122  | 137  | 152  | 171  | 225  | 284  | 225  | 178  | 163  | 160  | 151  | 146  | 135  | 134  | 132  | 130  | 117  | 92   | 74   | 85   | 93   | 95   | 104  | 104  | 105  | 107  | 114  | 121  | 134  |
| Florida.....                  | 74   | 76   | 81   | 75   | 79   | 84   | 97   | 110  | 137  | 135  | 120  | 119  | 126  | 132  | 171  | 140  | 135  | 134  | 132  | 128  | 108  | 93   | 97   | 98   | 103  | 102  | 101  | 102  | 103  | 108  | 115  |      |
| <b>East South Central:</b>    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Kentucky.....                 | 100  | 103  | 106  | 103  | 114  | 131  | 150  | 175  | 205  | 178  | 156  | 152  | 146  | 145  | 143  | 138  | 134  | 133  | 131  | 119  | 100  | 82   | 84   | 90   | 92   | 101  | 107  | 111  | 117  | 107  | 133  | 152  |
| Tennessee.....                | 97   | 101  | 105  | 101  | 112  | 122  | 146  | 170  | 202  | 171  | 155  | 160  | 149  | 138  | 135  | 131  | 129  | 126  | 125  | 116  | 97   | 79   | 85   | 92   | 98   | 101  | 103  | 105  | 109  | 114  | 125  | 140  |
| Alabama.....                  | 84   | 84   | 88   | 84   | 88   | 109  | 122  | 151  | 125  | 115  | 122  | 123  | 131  | 131  | 124  | 124  | 122  | 122  | 111  | 87   | 75   | 85   | 94   | 97   | 99   | 105  | 105  | 104  | 107  | 111  | 119  |      |
| Mississippi.....              | 99   | 103  | 103  | 99   | 113  | 123  | 133  | 158  | 222  | 152  | 151  | 146  | 137  | 139  | 136  | 129  | 126  | 124  | 124  | 114  | 94   | 74   | 84   | 92   | 93   | 99   | 108  | 108  | 108  | 113  | 124  | 136  |
| <b>West South Central:</b>    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Arkansas.....                 | 106  | 108  | 108  | 102  | 117  | 139  | 161  | 182  | 239  | 200  | 188  | 183  | 172  | 172  | 165  | 162  | 159  | 157  | 152  | 127  | 112  | 86   | 92   | 95   | 99   | 100  | 104  | 102  | 103  | 108  | 120  | 133  |
| Louisiana.....                | 90   | 93   | 90   | 87   | 96   | 102  | 130  | 142  | 180  | 148  | 127  | 131  | 124  | 128  | 130  | 122  | 120  | 120  | 120  | 110  | 93   | 81   | 87   | 94   | 95   | 99   | 107  | 106  | 110  | 110  | 117  | 132  |
| Oklahoma.....                 | 107  | 111  | 111  | 104  | 114  | 125  | 143  | 154  | 182  | 176  | 152  | 146  | 137  | 144  | 142  | 141  | 140  | 139  | 138  | 128  | 103  | 87   | 91   | 94   | 100  | 100  | 103  | 103  | 102  | 105  | 111  | 122  |
| Texas.....                    | 99   | 105  | 110  | 107  | 107  | 121  | 140  | 148  | 183  | 163  | 139  | 134  | 144  | 153  | 153  | 147  | 145  | 144  | 144  | 128  | 101  | 87   | 93   | 96   | 99   | 101  | 103  | 101  | 103  | 110  | 114  |      |
| <b>Mountain:</b>              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Montana.....                  | 183  | 188  | 194  | 188  | 177  | 188  | 199  | 215  | 236  | 198  | 180  | 164  | 153  | 141  | 136  | 133  | 133  | 135  | 135  | 129  | 109  | 89   | 91   | 95   | 101  | 102  | 101  | 102  | 104  | 107  | 116  | 130  |
| Idaho.....                    | 119  | 120  | 118  | 114  | 118  | 136  | 155  | 173  | 205  | 192  | 162  | 158  | 154  | 147  | 141  | 140  | 139  | 138  | 138  | 136  | 114  | 91   | 92   | 96   | 99   | 103  | 102  | 101  | 102  | 103  | 112  | 127  |
| Wyoming.....                  | 140  | 158  | 154  | 158  | 145  | 149  | 135  | 226  | 271  | 224  | 205  | 185  | 171  | 153  | 146  | 144  | 146  | 148  | 150  | 146  | 118  | 95   | 95   | 96   | 99   | 102  | 102  | 102  | 104  | 110  | 120  | 135  |
| Colorado.....                 | 169  | 177  | 169  | 161  | 175  | 183  | 189  | 203  | 242  | 226  | 211  | 194  | 168  | 159  | 153  | 141  | 141  | 141  | 135  | 131  | 111  | 92   | 92   | 92   | 92   | 97   | 103  | 104  | 104  | 105  | 108  | 119  |
| New Mexico.....               | 124  | 129  | 118  | 124  | 118  | 137  | 145  | 156  | 178  | 154  | 142  | 136  | 136  | 134  | 134  | 134  | 134  | 133  | 135  | 110  | 93   | 94   | 94   | 94   | 99   | 101  | 102  | 103  | 104  | 108  | 117  | 125  |
| Arizona.....                  | 101  | 106  | 111  | 103  | 101  | 111  | 132  | 148  | 175  | 156  | 143  | 132  | 136  | 129  | 133  | 131  | 131  | 130  | 130  | 110  | 92   | 95   | 95   | 97   | 100  | 102  | 101  | 100  | 101  | 102  | 108  | 116  |
| Utah.....                     | 114  | 117  | 111  | 111  | 119  | 133  | 138  | 165  | 190  | 165  | 152  | 152  | 149  | 148  | 147  | 146  | 145  | 144  | 144  | 139  | 112  | 95   | 95   | 95   | 99   | 102  | 102  | 102  | 102  | 102  | 108  | 114  |
| Nevada.....                   | 141  | 147  | 151  | 149  | 145  | 141  | 151  | 172  | 198  | 180  | 174  | 164  | 158  | 150  | 146  | 146  | 146  | 146  | 146  | 142  | 115  | 96   | 96   | 96   | 100  | 102  | 101  | 101  | 102  | 104  | 108  | 114  |
| <b>Pacific:</b>               |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Washington.....               | 120  | 122  | 126  | 122  | 125  | 137  | 144  | 149  | 171  | 162  | 152  | 144  | 141  | 138  | 137  | 136  | 135  | 135  | 135  | 133  | 112  | 90   | 90   | 94   | 98   | 103  | 103  | 102  | 103  | 103  | 111  | 124  |
| Oregon.....                   | 122  | 125  | 129  | 125  | 126  | 130  | 141  | 148  | 162  | 163  | 154  | 144  | 142  | 138  | 135  | 133  | 133  | 133  | 135  | 133  | 111  | 90   | 90   | 93   | 97   | 103  | 103  | 103  | 105  | 106  | 115  | 124  |
| California.....               | 77   | 82   | 90   | 92   | 96   | 108  | 113  | 118  | 139  | 139  | 138  | 137  | 136  | 136  | 135  | 134  | 134  | 133  | 133  | 131  | 110  | 90   | 91   | 96   | 99   | 103  | 102  | 100  | 100  | 101  | 106  | 117  |



