War, Technology, Farm Values 1941-1967

With the exception of two minor dips, in 1952-1953 and in 1960, farm values had a continuous rise from 1941 through 1966. By far the largest increase took place in the last two years of the period, in 1965 and 1966. The rise in these two years, from \$265 to \$331, amounted to \$66 an

acre, an increase of 25 per cent.

World War II started farm values on the first major upward trend since the land boom of 1919-1920. The slight rise during the 1934-1936 period was merely a recovery from the depression crisis of 1932-1933. World War II, just like World War I, was forcing product prices up and this in turn was lifting land values. Corn, which averaged 39 cents a bushel in Iowa in 1939, was up to 58 cents in 1941, to 72 cents in 1942, and to \$1.00 in 1944. Those who had bought farms on the bargain counter in the late 1930's not only were getting a rising net income from their farm operations during World War II but they also saw the value of their farms rise slowly at first and then move up fairly fast. Average values, starting at \$88 an acre in 1941 were up over 50 per cent to \$140 an acre at the end of World War II.

Many looked for another land boom and bust

after the end of World War II, similar to the aftermath of World War I, but the depression of the 1930's was still a potent deterrent and economic events took a different turn. Actually the ingredients of another land boom were all present with corn prices averaging \$1.84 and \$1.85 a bushel in Iowa in 1947 and 1948. Gross income per farm, which averaged \$7,300 in 1945, shot up to \$11,500 in these same two years. But an active educational campaign against land speculation received a favorable response, especially from those who had recently experienced heavy financial losses from the boom of 1919-1920. Then, too, conditions were different. Instead of a return to "normalcy" in the late 1940's, similar to the postwar years in the 1920's, the Cold War developed and it was followed by the Korean conflict. The economic upsurge caused by these two events maintained high farm product prices and gave added support to farm values. There was a small decline in values during 1952-1953 following the end of the Korean War, but after that values started up again at a fairly steady rate.

At this point a new powerful factor entered the scene in the form of improved farm technology. It took a number of forms but the sum total result was increased production per acre and the ability of the farm operator to handle more acres with improved power and equipment. In short, beginning in the years 1953-1955, the effects of a speed-

ed-up agricultural revolution in farm technology were being felt.

The technological revolution in Iowa farming in the 1953-1967 period has been striking. Evidence to document the change is readily available. First we have corn yields which in the years 1950-1954 averaged 52 bushels an acre, in 1956-1960 averaged 62 bushels, and in 1962-1966 averaged 82. The increase in the averages from 52 to 82 was phenomenal with most of the increase occurring since 1960.

Another startling change was the increase in soybean acreage in recent years, mainly at the expense of oat acreage. The figures on Iowa acreage in millions of acres are as follows:

	Acreage		
	Soybeans	Oats	
1953	1.6	5.7	
1960	2.6	4.0	
1967	5.7	1.8	

In this short period of 14 years the position of the two crops has been almost completely reversed. Back in 1953 there was more than three times as much Iowa farm land in oats as in soybeans. In 1967 there was more than three times as much land in soybeans as in oats. The effect of this change on net income and land values can be seen by comparing the average acre return on soybeans at \$70 (28 bushels at \$2.50) with that on oats at

\$35 (50 bushels at .70 cents). Twice as much gross income per acre comes from soybeans as from oats, and a similar relationship holds for net income. Thus the increase in soybean acreage indicates an important reason why farm values have risen dramatically in recent years.

Back of the changes in corn yields and soybean acreage are new technologies in seed, fertilizer, herbicides, pesticides, and other cropping factors. What is important for our purpose is the effect of all these changes on income, because land income changes have a direct effect on land values.

A final and all important feature of the current agricultural revolution as it has been happening in Iowa is the marked change in power and equipment. One can measure this in the size of the farm unit, with the following figures telling much of the story for Iowa:

	Number of Farms	Average Size	Number of Persons Living on Farms
1954	194,623	179	733,196
1960	180,595	192	667,823
1966	149,277	224	577,136

The farm operator who handled 179 acres in 1954 was handling 224 acres in 1966 and will be handling more in the years ahead in all probability. It is not just more power and larger machinery, it is also new types adapted to new cropping practices.

The effect of the new power and machinery

technology has been recorded in the increased demand by farmers to expand the size of their farms. Farm enlargement as a bullish land value factor was first reported in the 1955 annual farm value survey conducted each year since 1942 by the Agricultural Experiment Station at Iowa State University. The survey report for November 1, 1955, showed values up \$10 an acre over values a year earlier, with the following comment:

The pressure of farm owners wanting additional land to enlarge their present farms was a strong factor in the rising values. In most cases these farmers have enough machinery and labor to operate larger farms than they now have. And they're often willing to pay more than the prevailing market price to get an adjoining tract of unimproved land.

In each of the succeeding annual broker surveys, from 1956 through 1966, farm enlargement has been emphasized by the brokers as an important factor in the market in pushing farm values higher. Even in 1960 when values declined, pressure to expand farm size was reported as a bullish factor preventing values from going lower.

In 1966 when farm values advanced 13 per cent to the highest point on record, farm enlargement was listed by the brokers as the major cause, as indicated by this statement in the report:

Again this year, farm enlargement was reported as the most important factor in increasing land values. About 84 percent of the participating brokers indicated that the

desire to enlarge existing units by successful farmers was the major reason for higher values in 1966. The willingness of many farmers to pay higher prices for adjoining tracts was definitely the most important cause of higher land values in the North Central Grain region, while it was not as important in Southern Pasture.

In 1964 a significant event concerning Iowa land values occurred and one which received little notice at the time. In this year the average value of Iowa farms climbed above the 1920 land boom peak of \$255 an acre to \$265 an acre. In each year since a new high point has been reached. presented in the center spread, farm values

For the farm owner of 1967, who bought a farm during the 1930's or held on to his farm during those years, the contrast between conditions now and then is almost too great to believe possible. The farm bought in the 1930's has increased from around \$85 an acre to an average of \$331, an increase of almost four times. If it were a 200 acre farm, the value has gone up from around \$17,000 to \$66,000.

With farm values at an alltime high in 1966-1967 the question in the minds of many present and prospective farm owners is where are values likely to go from here. It is impossible, of course, to forsee the future clearly, but it is possible to get some insight into the likely trend of the years ahead. This can be done by taking a hard look at the factors which make land value.