THE PRODUCTION AND MARKETING OF POULTRY AND EGGS IN NEW MEXICO

THESIS

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For the Degree of

MASTER OF SCIENCE

By

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CHAPTER I

INTRODUCTION

In length of time occupied by the white man, New Mexico is one of the oldest areas in the United States, yet in many agricultural respects it is one of the youngest areas in the nation. Being famous for generations as a sheep country, and later as a cattle country, it has been and still is slow to give ground to such intensive agricultural enterprises as chicken and egg production.[1]

For the state as a whole, eggs and chickens are not an important source of income. Most of the agricultural income is derived from range livestock, wheat, and cotton. The total sales of both poultry and eggs amounted to only 2.55 per cent of the sales for livestock in 1950. Of total cash receipts received by farmers, poultry and eggs amounted to 1.58 per cent.

From a national standpoint, poultry and eggs ranked third in importance in 1950,[2] following livestock and dairying. The total income from poultry in the United States

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[1] N.M. Chicken & Egg Production Experiment Station Bulletin 352, (State College, N.M., 1949), p.1.

[2] Agricultural Statistics, Bureau of Agricultural Economics, (Washington 25, D.C., 1950).

was 17.5 per cent of the total for all livestock and livestock products. In total agricultural income, poultry made up 9.8 per cent of the amount.

New Mexico ranks forty-fifth as an egg producing state, and poultry meat production is so limited that it is not listed in agricultural statistics.[3] The production of poultry meat is estimated at 8,104,000 pounds, which would supply 11.9 pounds per person. With the average consumption per person in 1951 being 29.7 pounds, the production in the state supplies only 40 per cent of the demand.[4] Only in post-war years has any interest been shown in producing poultry meat for market and production is limited to the eastern part of the state.

There is a tremendous deficit of egg production in the state. Of the total consumption, only 45 per cent is produced in New Mexico. Of the thirty counties in New Mexico only seven produce enough for consumption in the county. These high production counties are located in the eastern part of the state and in them a very peculiar marketing situation exists. Dealers buy poultry and eggs from farmers and ship them out of state to lower priced markets. In many

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[3] Ibid.

[4] Marketing Farm Poultry, Farmers Bulletin No. 3030, (U.S. Department of Agriculture, 1951), p. 5.

instances the same products are processed and graded and returned to the retail channels in New Mexico.

Approximately 75 per cent of all eggs sold at retail are shipped from out of state sources. Many of these fall into lower quality groups before they reach the consumer. Even though a large per cent of the eggs are bought on a graded basis, there is considerable deterioration by the time they reach the retail market. The quality of the eggs has been so poor that, in many instances, consumers drive to the poultry farms to purchase fresh eggs and are willing to pay a premium of fifteen to twenty cents per dozen to get the best quality.

An egg grading law became effective in July, 1951, which aids the consumer in buying eggs on a graded basis and should help the producer to receive a better price in some areas.

The objective of this study is to accumulate information and to determine whether poultry and egg production could be profitably increased in New Mexico. Prices received for poultry and eggs, prices paid for poultry rations, handling costs of egg dealers, and marketing of poultry and eggs will be fully covered. Factors affecting the production and marketing will be discussed thoroughly enough that anyone interested in poultry production in New Mexico may get an idea of the problems involved and the results that can reasonably be expected.

Part of the data in this report was obtained by a questionnaire to the egg dealers operating in New Mexico, but most of it was obtained through discussions and interviews with general farmers and poultrymen contacted by the author.

CHAPTER II

IMPORTANCE OF THE POULTRY INDUSTRY

Types and Areas of Production

There are five general types of poultry production in New Mexico. Of all five groups, the farm flock is most common. Near most of the large consuming areas, larger commercial flocks for egg production are quite numerous. Another type, which is not of great importance, is commercial broiler production. The fourth type is the part-time flock, whose operator may have full or part-time employment elsewhere or other sources of income. The fifth type is the back-yard flock, usually a small flock maintained for home use.[1]

The farm flock makes up a large percentage of the poultry and is fairly general all over the state, as shown in Figures 1 and 2. There is a higher percentage of farms reporting poultry in the eastern part of the state than in any other section. In 1950, the six eastern counties of the state had a total of 42 per cent of all poultry reported in New Mexico.[2]

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[1] N.M. Chicken and Egg Production, Experiment Station Bulletin 352, (State College, N.M., 1949), p.6.

[2] 1950 Census of Agriculture for New Mexico, U.S. Department of Commerce.

The large commercial flocks are located near the areas of high consumption, such as the larger cities like Albuquerque, Roswell, Santa Fe, Las Vegas, or El Paso, Texas. Local demand is so great for high-quality eggs in these areas that consumers pay a premium for fresh products.

There are very few broiler enterprises of any size in the state. Most poultrymen in this type of business are located near cities where their products can be sold directly to consumers, retailers, or restaurants. Some broiler production takes place where laying flock replacements are bought as unsexed chicks and the cockerels are sold as broilers. This type of broiler production is most common in the state.

Part-time flocks are maintained near all the larger cities. Most of these operators are employed in town and are keeping the poultry flock to supplement their income. In the deficit production areas like Albuquerque, Santa Fe, and Roswell, this is especially true. Feed dealers in many sections of the state carry on this type of production.

Back-yard flocks are found in practically all cities and towns where there are no regulations prohibiting the keeping of chickens.[3] Flocks like these are often temporary, because of the ease of getting into and out of the business.

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[3] New Mexico Chicken and Egg Production, Experiment Station Bulletin 352, (State College, N.M., 1949), p.9.

This type of flock does not affect the market seriously except in the spring, when production reaches its peak. Then, because of their surpluses, these small producers begin flooding the wholesale channels in their locality.

In the 1950 Census of Agriculture for New Mexico, 234 farms were listed as poultry farms. A total of 16,358 farms or 69 per cent of the state's farms were listed as having poultry. The counties having the highest percentage of farms with poultry were located in the eastern part of the state. Curry County, in eastern New Mexico, had an average of 71 chickens per farm. Roosevelt County, also on "east side" of the state, had the greatest poultry numbers. Of all farms having chickens, the average number was 51 birds per farm. (See Figures 1 and 2.)

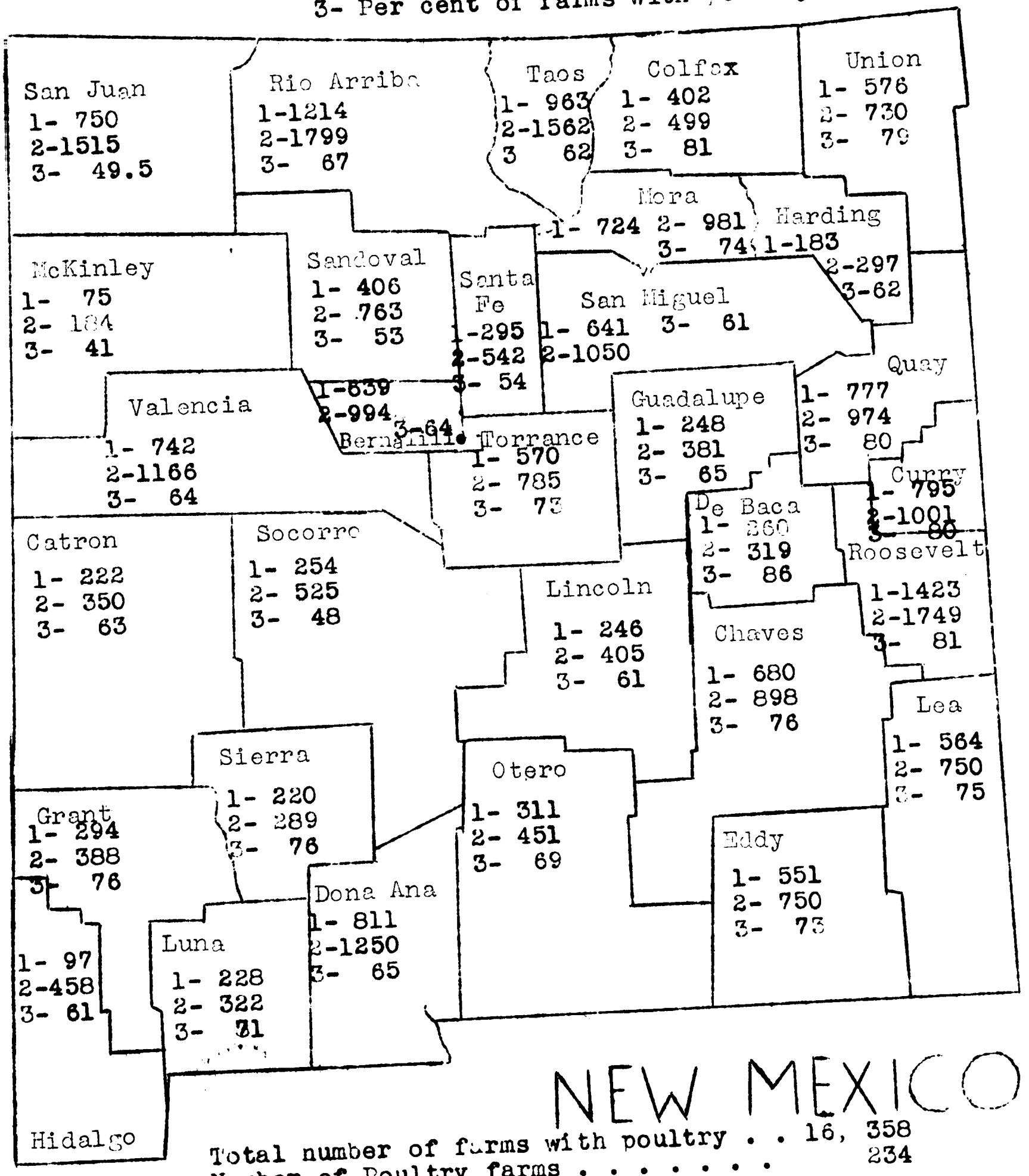
Sources and Types of Chickens

Most poultrymen in the state rely on commercial hatcheries for chicks. There are 21 hatcheries listed with the New Mexico Agricultural Extension Service, with a total hatching capacity of approximately 800,000 eggs. (Figure 3 shows the distribution of hatcheries in the state.) Four of these hatcheries belong to the state association of the National Poultry Improvement Plan.

Most of these hatcheries offer a good variety of chicks, and they are located in such a way that most poultry producers do not have to travel far to be supplied with chicks.

Figure 1

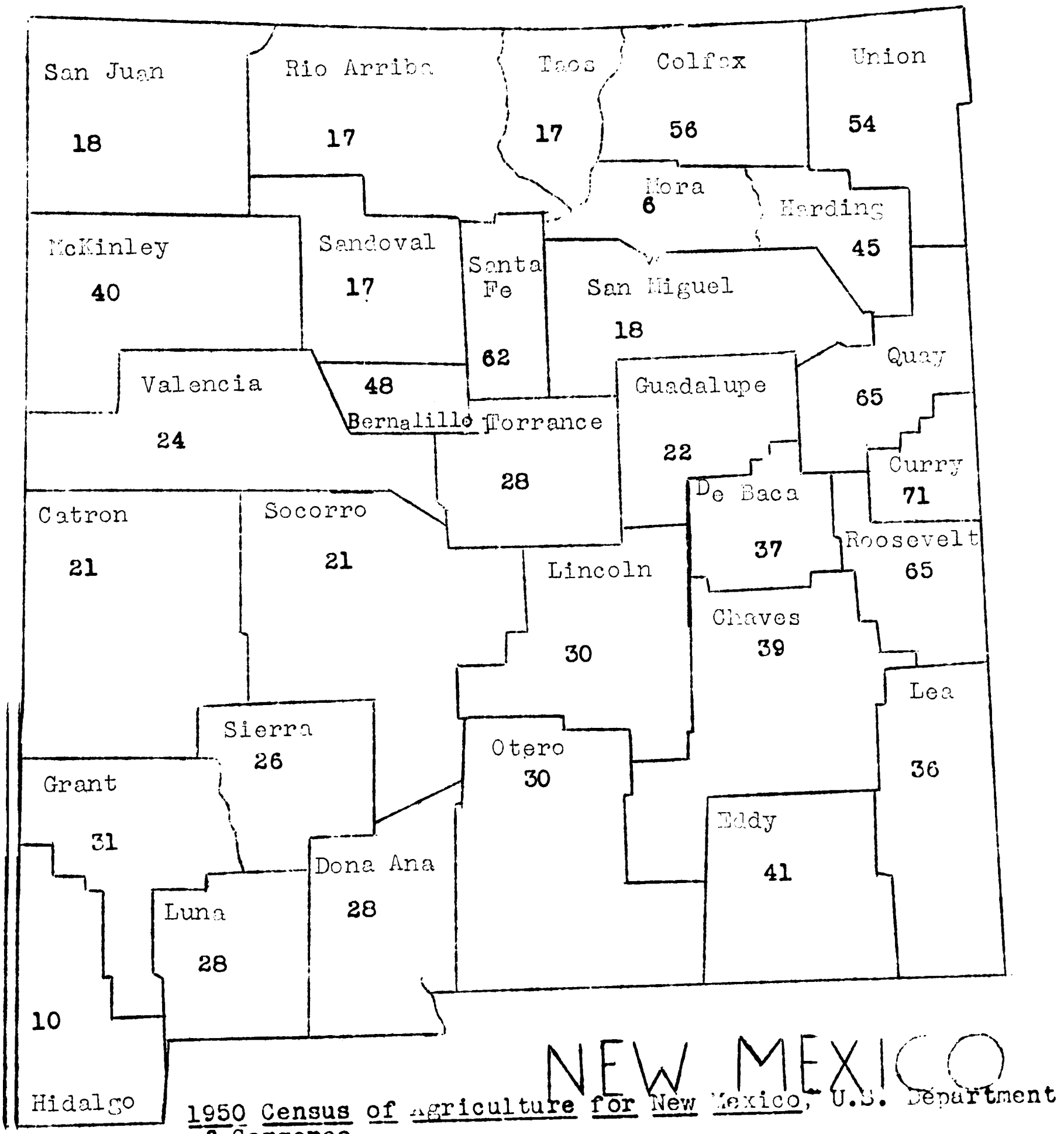
Location of Poultry Farms
1- Number of farms with poultry
2- Number of farms in the county
3- Per cent of farms with poultry



Total number of farms with poultry . . 16, 358
Number of Poultry farms 234

Figure 2

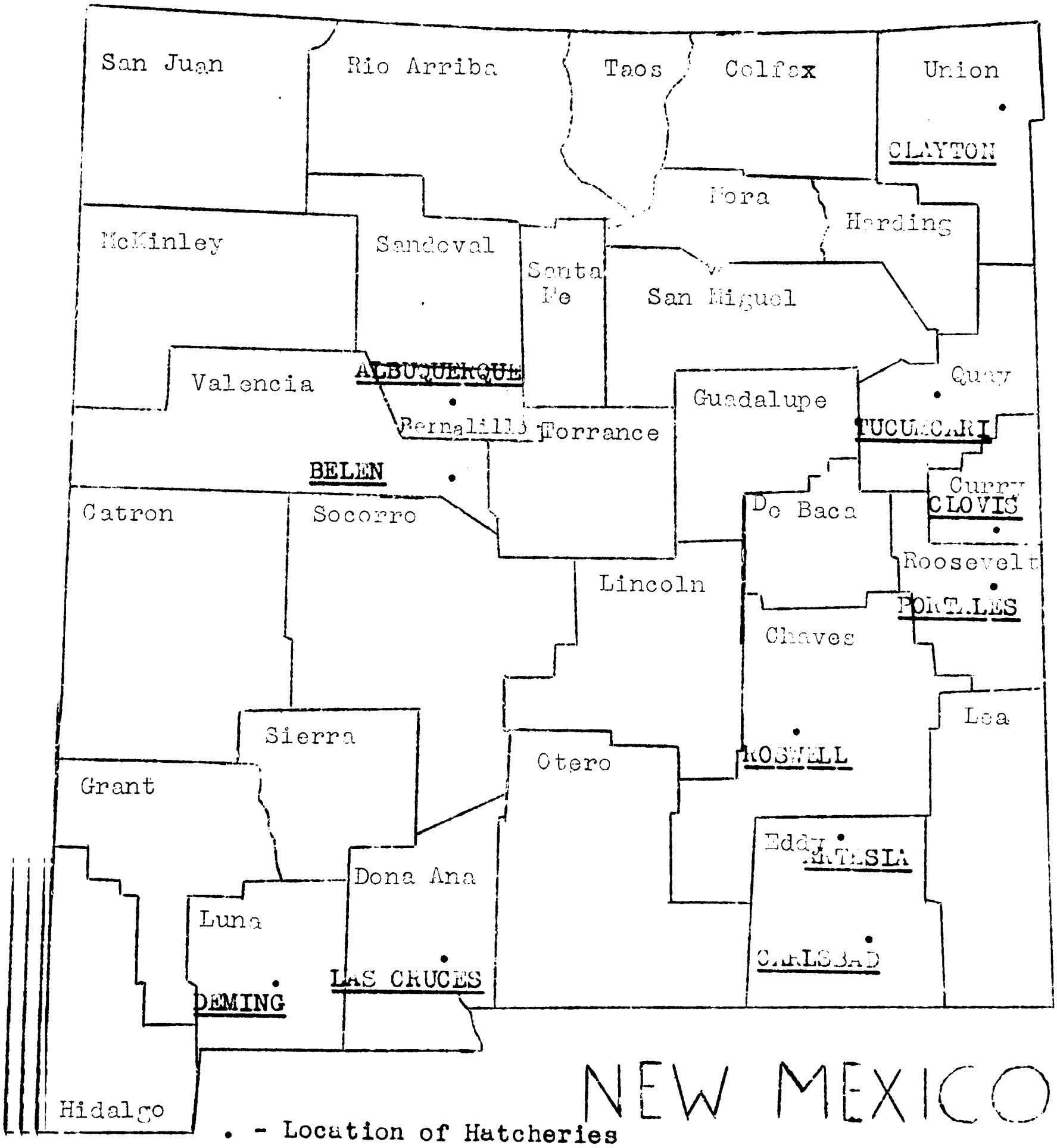
Number of Chickens Per Farm by Counties



1950 Census of Agriculture for New Mexico, U.S. Department of Commerce.

Figure 3

Location of Hatcheries



• - Location of Hatcheries

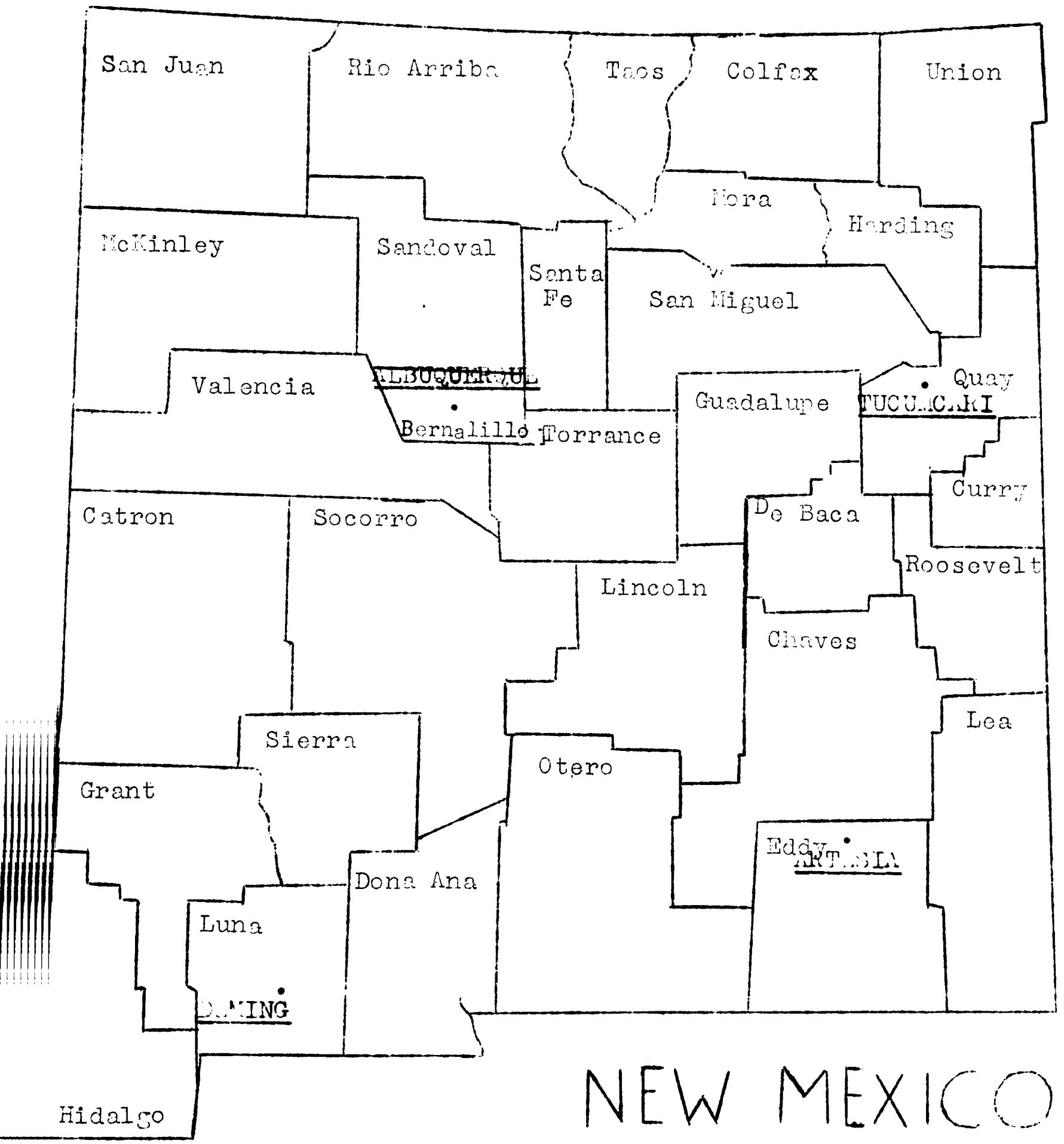
These hatcheries, however, do not produce enough volume to discourage out-of-state hatcheries. The possibilities for increasing the capacity of hatcheries seems encouraging, but until the out-of-state competition can be met, it is unlikely that new hatching plants could fulfil the economic need. In the post-war years, a large percentage of the baby chick supply has come from hatcheries outside New Mexico. This has often caused serious trouble, especially when the baby chicks come in contact with diseased chicks that have been shipped from out-of-state hatcheries which do not have a good disease control program. Many operators of poultry farms have become exceedingly wary of such hatcheries after receiving diseased chicks from them. Because of the steady improvement in the quality of chicks within the state in post-war years, increased hatchery production could be possible in the future.

The four hatcheries operating under the National Poultry Improvement Plan are raising the quality of their chicks very rapidly. In 1952, two hatcheries were producing certified chicks. Indications are that three hatcheries will be producing this grade of baby chick during 1953.

Many poultrymen of New Mexico are becoming aware of the standards of the National Poultry Improvement Plan. The hatcheries operating under this plan (Figure 4) have two different types of programs: a breeding program and a disease control program. The breeding program is designed to improve the quality of flocks and to raise the rate of egg production.

Figure 4

Location of Hatcheries Participating in the National Poultry Improvement Plan



The disease control part of the program is concerned chiefly with pullorum, a great menace to baby chicks. As more hatcheries are operating under the Plan, with its advantage of national advertising, increased use of home-produced chicks is likely.

Farm stores and feed dealers have begun handling a greater volume of chicks in recent years, chiefly because they handle a more complete line of poultry equipment than do most hatcheries. The chicks received from this type of outlet are seldom of the best quality. The poultrymen buying these chicks are not usually large producers, and poultry and egg production is generally incidental to their regular occupations.

New Mexico farms have many different breeds and varieties of poultry. The use of the bird, whether for meat or egg production, usually determines the type. When the buyer cannot obtain the desired breed or variety for his needs, he substitutes.

The most common varieties are White Leghorns, New Hampshire Reds, Rhode Island Reds, and Plymouth Rocks. A number of producers have recently switched from standard to crossbreeds. Of these, the White Leghorn - New Hampshire cross seems to be the most popular. Another crossbreed that is rapidly gaining in importance is the Hyline. Large commercial producers in different parts of the state have changed over from standard-bred to Hyline in the past two or three

years. Even though some of the large commercial flock owners who have changed to the Hyline claim that this crossbreed excels in egg production, this superiority has not been proved and seems unlikely. The baby chicks of Hyline breeding usually cost from two to three times as much as certified chicks from hatcheries operating under the National Poultry Improvement Plan. It is very doubtful whether this extra initial cost can be justified.

Production Problems

The greatest production problem confronting poultrymen in New Mexico is that of disease. The disease that causes the most trouble in flocks is the avian leukosis complex. The paralytic symptom of this disease originally gave it the name "fowl paralysis," but when it was later determined that there was more than one type of the disease, the term avian leukosis complex was applied to cover all five types of leukosis. When leukosis strikes a flock, production usually drops considerably and mortality very often runs high. As yet, no control measures have proved successful.

Newcastle disease is of serious importance to the poultryman. Although the virus that causes Newcastle has not been identified in New Mexico, the symptoms observed in some flocks are identical to that of Newcastle. This disease is being controlled by vaccination.

Several other respiratory troubles have been noted in flocks throughout the state, although complete diagnosis has not been made up to the present time.

Pullorum is still a problem for some flock owners, but with development of sulfa drugs, this is being controlled fairly well. Purchase of chicks from pullorum-clean flocks still remains the best method of avoiding trouble.

Costs of Production

The average poultryman, in thinking of production costs, has in mind only his cash outlay. He does not think of the time that his wife or other members of the family spend in packing eggs, tending baby chicks, or performing other duties connected with poultry. He forgets that he has capital invested in the business that could be placed elsewhere at a fairly safe rate of interest. Few poultrymen include depreciation in value of houses and equipment when computing the cost of the enterprise.

All these costs, though not at first apparent, enter into the cost of production and must be considered if the poultry industry is to be placed on a business basis.

Prices are determined largely by supply and demand and are, to a large extent, not under the control of the producer. He can influence them to some extent by selling direct to the consumer, by finding a local or preferred market, by better grading, or by producing a better product.

But no matter which method he uses, the price is still subject to the law of supply and demand and is still influenced by daily and seasonal variations.

The investment in a chicken enterprise at present can easily amount to several dollars per chicken. The amount invested is determined by the size and quality of the flock, type of production, and location. High-quality chicks cost from 25 cents to 30 cents each for pullets, or 16 cents to 20 cents for straight run. Pullets going into production represent approximately $2 apiece, and chicks of special breeding may run as high as $2.50 each. Building costs range from $1 to $4 per hen, and equipment costs will run from 50 cents to $1 each, depending largely on the size of flock.[4]

Land values affect the investment in a poultry enterprise. Near the larger cities, where farm real estate is high because of location value, land may cost as much as $1500 or more per acre. In the irrigated areas near Albuquerque, Las Cruces, or Carlsbad, the price per acre of land is extremely high. In the dryland areas, the land may not be valued at more than $50 per acre.

Housing for commercial flocks represents one of the largest costs. A modern-type poultry-house, with some labor-saving devices, averages about 50 cents per square foot of

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[4]Statements made by county extension agents and poultrymen, personal interview.

floor space or $1.50 to $2 per hen housed. Almost all farm flocks are housed for less, but these flocks do not attain as high production as commercial flocks. Part-time flocks are generally housed much better than farm flocks, but the investment per hen is also larger. Backyard flocks are usually housed in structures that originally had been built for other purposes. Naturally, with such housing, investment costs are usually lower for the backyard flock.

Commercial flock owners keep their chickens confined, but most farm flocks are allowed to run free. This is one reason why housing runs higher in the commercial flocks, as more space per bird is allowed when they are confined.

Housing for broilers in New Mexico is quite different from that of other broiler-producing areas. A unit of production here rarely runs more than 200 birds, whereas in broiler growing areas, the unit may be as high as 20,000. Therefore, the average cost of housing per unit will run higher in New Mexico than in other states where broiler production is a more specialized business.

Equipment costs run much higher for commercial flocks than for other types of flocks. Facilities for handling these flocks are generally better, and the type of equipment used is for permanent rather than temporary operation. Many farm or backyard flocks are brooded with electric light bulbs, whereas the commercial flock owners use gas or electric brooders. Many large operators are now changing over to

infra-red bulbs for brooding. These bulbs seem to have a germicidal effect that offsets the extra cost of operation; however, this theory has not been proved. The infra-red lamps for brooding have increased the cost of electricity also, causing the costs of production to be increased.

Cost of feed is the largest single item of expense for those entering the poultry industry. Before any return to the producer is made, feed will cost on an average of $1.30 a bird to the producer. The breed of chicken has an effect on feed costs: lighter breeds do not require as much feed as heavy breeds, although when marketed, the light breed sells for less money per pound than the heavies. The cost of feed for raising the pullet and for feeding her through one full year of production amounts to an average of about $6.15 per bird.

The feed for broilers, like that for laying hens, is the largest single item of expense. Under average conditions in New Mexico to produce a three-pound broiler will require ten to twelve pounds of feed and a growing period of nine to twelve weeks. Average broiler rations are $6 per hundred-weight, and the baby chick costs, on an average, are 17 cents each. The costs of feed and purchase price of the bird will range from 77 to 81 cents each. Volume production could cut down on costs, but the volume here in the state is much too small to demand discounts on volume purchases of feed, chicks, and equipment.

By increasing the amount of production, the commercial operator, in either meat or egg production, could cut his feed costs by approximately $1 per hundredweight. Some poultrymen near Albuquerque and Santa Fe have tried mixing their own feed and have found it to be quite satisfactory and economical. Others buy the ingredients from feed companies and hire the feed custom-mixed. This method has also been proved satisfactory as well as economical.

CHAPTER III

COMPARATIVE PRICES IN NEW MEXICO AND COMPETING STATES

Poultry Rations

New Mexico does not produce enough poultry feed to supply its home needs. Only in the east-central dry-farming area of the state is it normal for more grain to be produced than is consumed. In no part of the state are animal protein feeds produced in quantities sufficient for needs. As a rule, protein concentrates are purchased in ready-mixed feeds, and little or no dependence is placed on local production.

Of the grains usually used in mixed feeds or scratch feeds, only wheat and grain sorghums are grown in quantity. In the eastern part of the state, both wheat and grain sorghums are sold, but in other areas the production of feed grains is limited primarily to grain sorghums. This lack of home-grown grains and other feeds forces poultry producers to rely largely on feeds from outside the state. As a consequence, feed costs are higher than in states where a surplus of feed exists.[1]

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[1] New Mexico Chicken and Egg Production, Bulletin 352, (State College, N.M., 1949), p.18.

The prices paid for poultry rations are taken from Crops and Markets for the years 1947, 1948, 1949, and 1950. These four post-war years are representative of the long-term trend in prices for poultry rations in New Mexico and in surrounding states from which poultry and eggs were imported. The states included in this study are New Mexico, Arizona, Texas, Oklahoma, Colorado, Nebraska, and Kansas. The figures in each table are a simple monthly average.

In 1947, the prices which New Mexico producers paid for poultry rations averaged $4.27 per hundredweight as shown in Figure 5. Only one state of the group studied exceeded New Mexico's price. Arizona had an average price of $4.38 per hundredweight. Most of the other states in the group ranged near or below $4.00 per hundredweight. The average price paid over the United States was $4.17.

Prices paid for poultry rations were considerably higher in 1948 than in 1947. (See Figure 6.) For New Mexico the average price was $4.49 per hundredweight, or approximately 10 per cent higher than the previous year. Arizona was still high for the group, but the national average was still less than that of New Mexico. The average price for the United States was $4.25 per hundredweight or about 1 per cent higher than 1947. One of the reasons for the rise in prices is that labor costs had increased over this period, thus raising the cost of feed. Some of the cause for the higher price could be attributed to the smaller crop of

Figure 5

Prices Paid for Poultry Rations (1947)

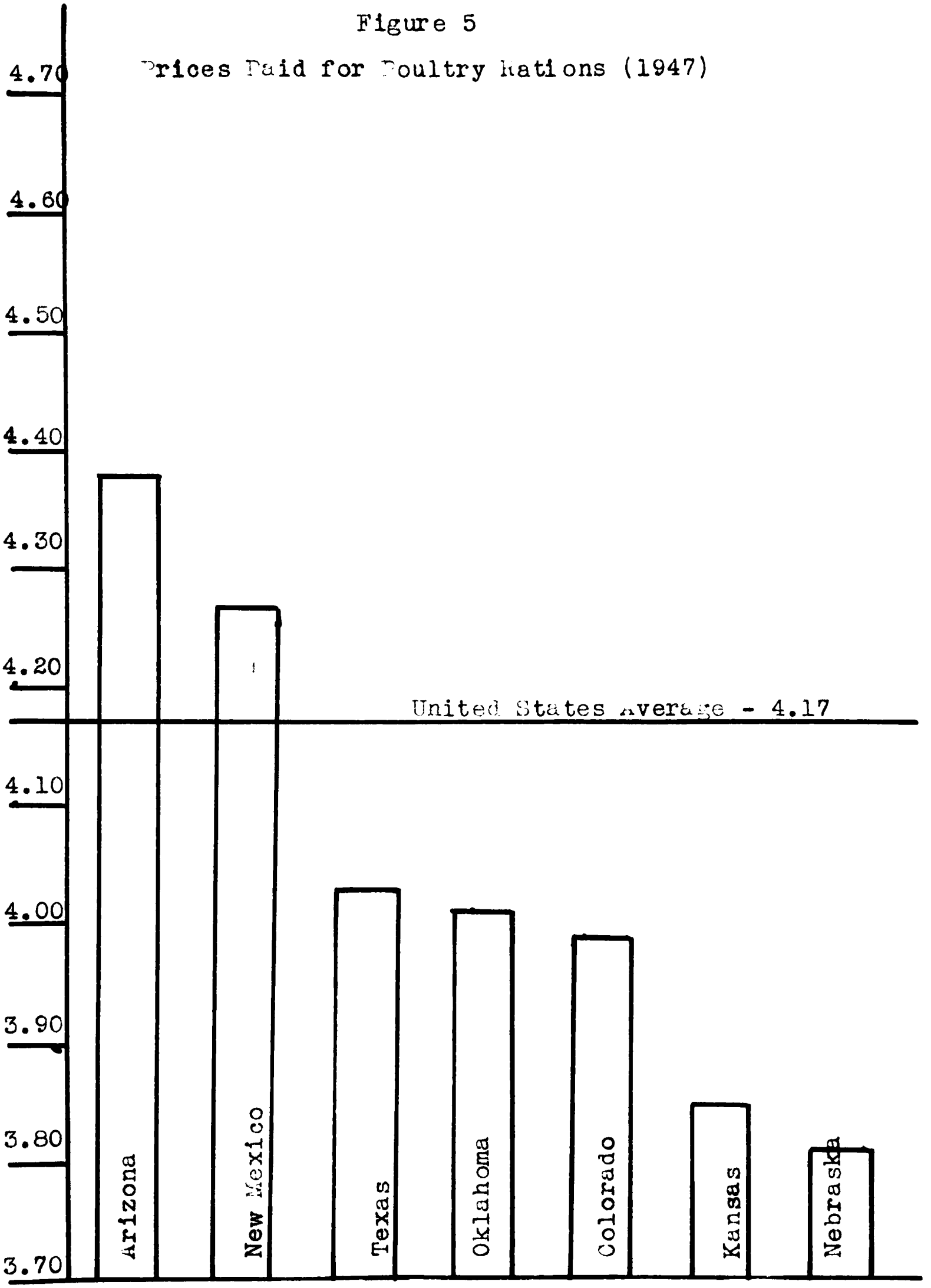
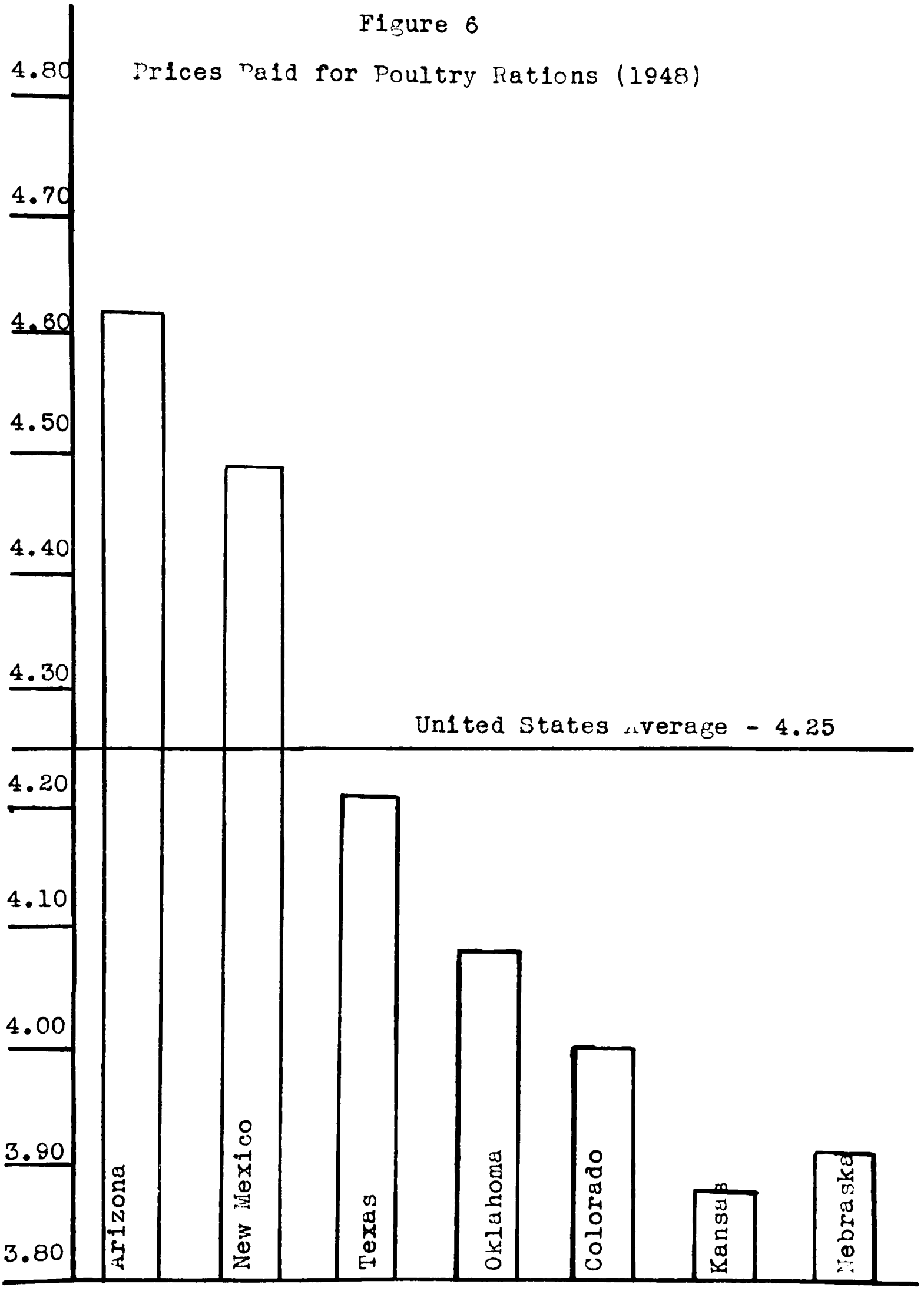


Figure 6

Prices Paid for Poultry Rations (1948)



feedstuffs of higher protein value. In 1947, the volume of soybean oil meal, an important product in the poultry ration, was considerably below the year before.

In 1949, the prices for poultry feed as a whole dropped considerably. From the high of $4.49 in New Mexico in 1948, the prices dropped to $3.82 per hundredweight. This drop ran about 15 per cent. Arizona ran higher than New Mexico, but all other states were lower. The average cost for the United States was $3.46 per hundredweight for poultry rations. In other words, the price that producers of New Mexico paid was almost 6.5 per cent higher than the average for the United States. The probable cause for this was the large crop of feed grains and high protein concentrates that were produced the previous year. Prices are shown in Figure 7.

During 1950, the prices paid for poultry rations remained relatively the same as in 1949. New Mexico still ranked second to Arizona for the highest prices paid for feed. In 1950, the average for the state was $3.83 per hundredweight, while the national average was $3.58. States that compete with New Mexico producers had a considerably lower price. Figure 8 shows a comparison between New Mexico and competing states.

Figure 7

Prices Paid For Poultry Rations (1949)

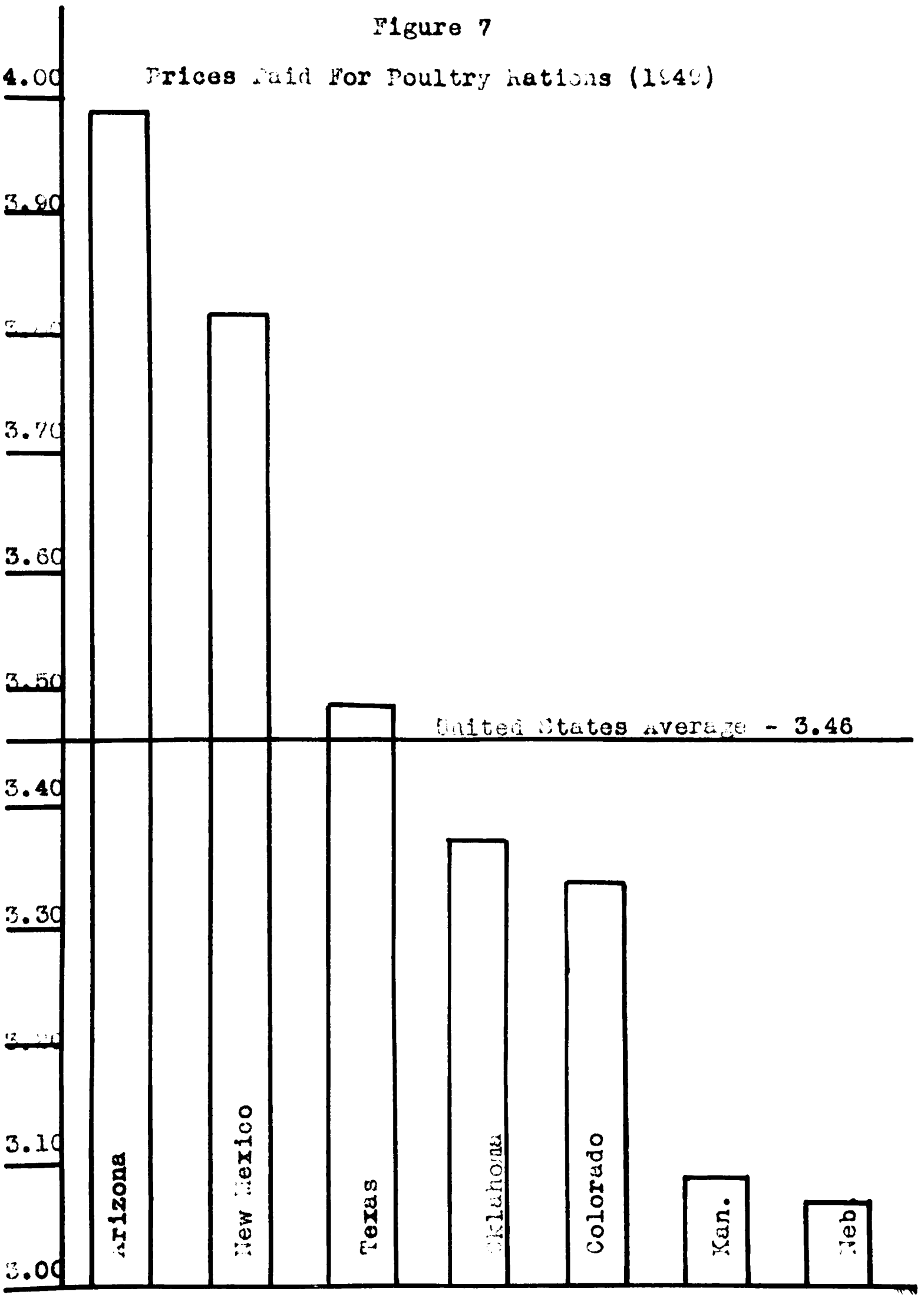
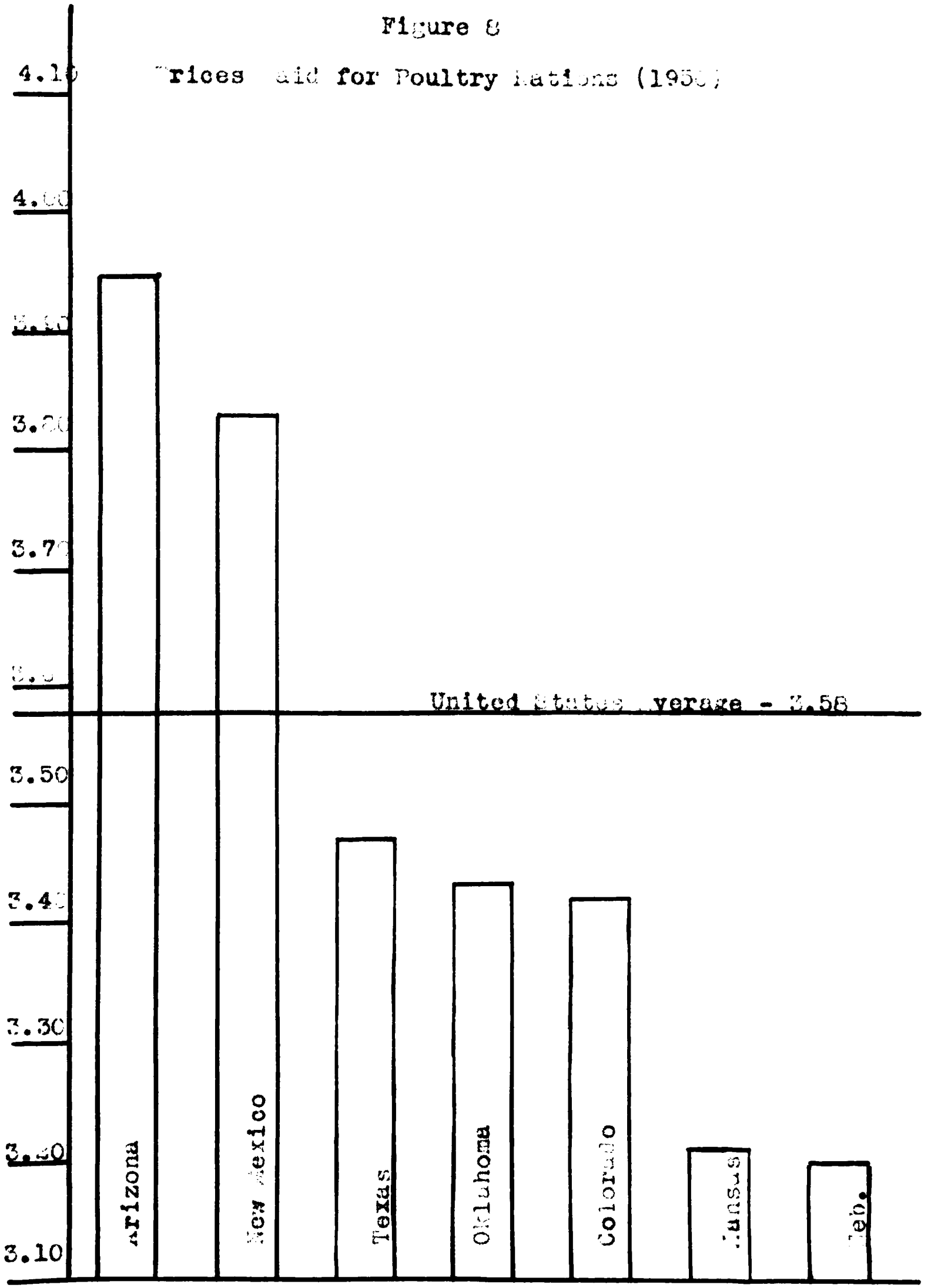


Figure 8

Prices aid for Poultry Nations (1950)



Chicken-feed Price Ratio

Price ratios for chicken-feed were determined for the years 1947, 1948, 1949, and 1950. The states included were the same as those in the study of poultry rations. A comparison of the chicken-feed ratios points out one of the problems confronting New Mexico producers.

A chicken-feed price ratio is determined by the number of pounds of poultry ration equivalent in value at local farm markets to one pound of chicken (liveweight).[2] This is done by dividing the price of one pound of poultry ration into the price of one pound of poultry.

For profitable poultry meat production, the ratio of one pound of chicken (liveweight) to 7.5 to 8 pounds of feed is considered profitable.

In 1947, the chicken-feed price ratio for New Mexico was 5.7 (as shown in Figure 9), which would be considered unprofitable. Only two other states in the group had a ratio this low. The average for the United States was 6.5. Arizona, with 7.7, was high for the competing states. These figures were determined by a simple average of the ratios for each month.

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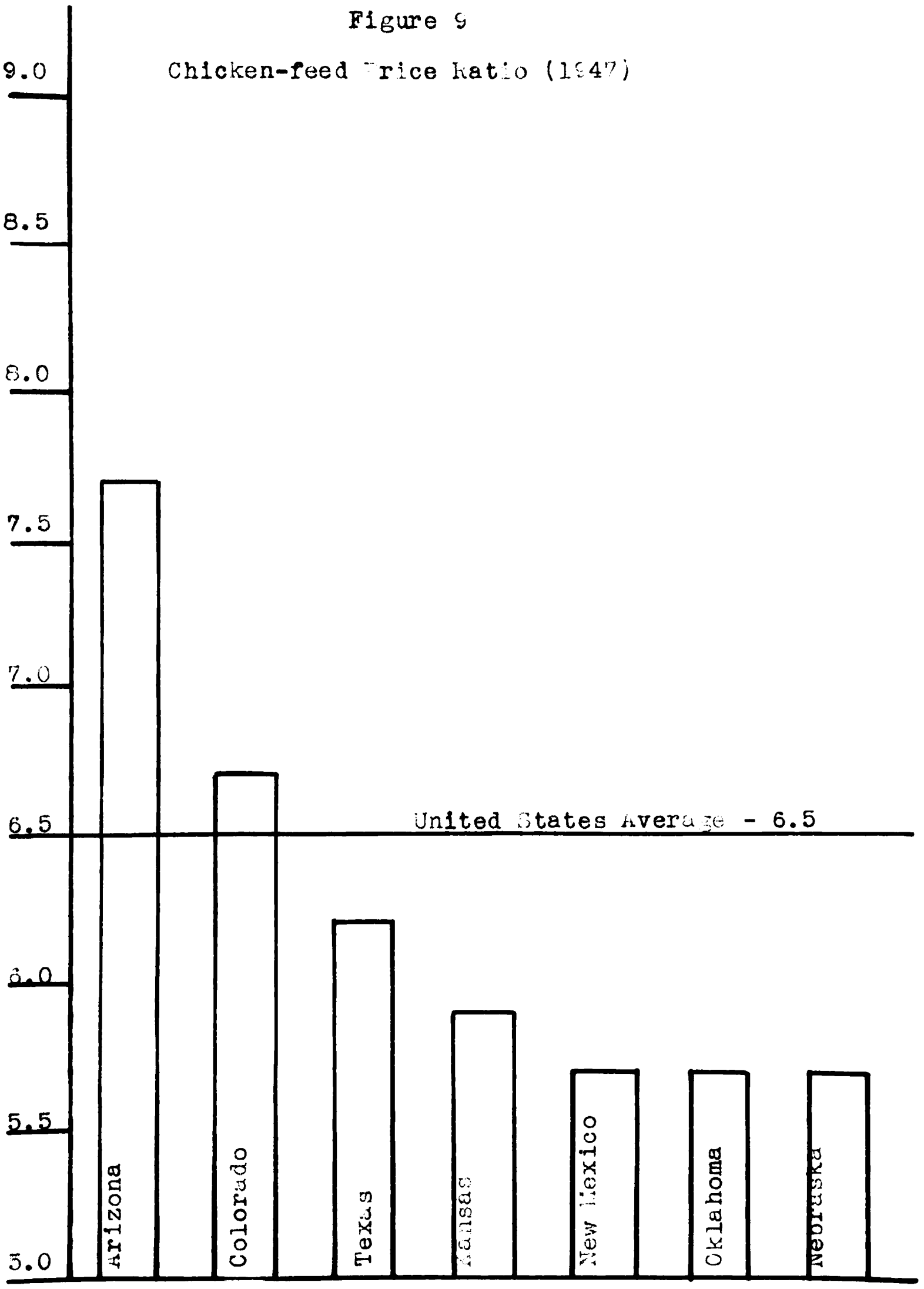
[2] Crops and Markets, (U.S. Department of Agriculture, Bureau of Agricultural Economics, Washington 25, D.C., 1951), p.127.

Figure 9

Chicken-feed Price Ratio (1947)



For the average in 1948, New Mexico was low, and the ratio remained at 5.7, the same as in 1948. All competing states increased their respective ratios. (See Figure 10). Arizona was the only one to show a favorable ratio. The average ratio for the year for the nation was 7.0.

The probable reason for the higher production in 1948 was that the average price of broilers per pound increased more than 10 per cent. The price of beef was another factor that probably caused broilers to sell higher. The average wholesale price for beef at both Chicago and New York was higher than any of the other years. The price for pork was also very high in 1948, and the trend in marketing is for poultry and swine prices to follow each other fairly close.

During 1949, New Mexico remained low as far as the chicken-feed ratio was concerned. The nation as a whole increased its ratio to 7.7, an even 10 per cent increase, but for New Mexico the increase raised the ratio to only 6.1. Figure 11 gives a comparison of these ratios.

In 1950, there was a considerable decrease in the chicken-feed ratio. New Mexico had a ratio of 5.6, which for the first time was higher than some of the other competing states. The United States average was 6.4 for this year, and Arizona was high for the group with 8.2. Again, it was the only state to have a favorable ratio for poultry production. See Figure 12 for the ratio comparison for 1950.

Figure 10

Chicken-feed Price Ratio (1948)

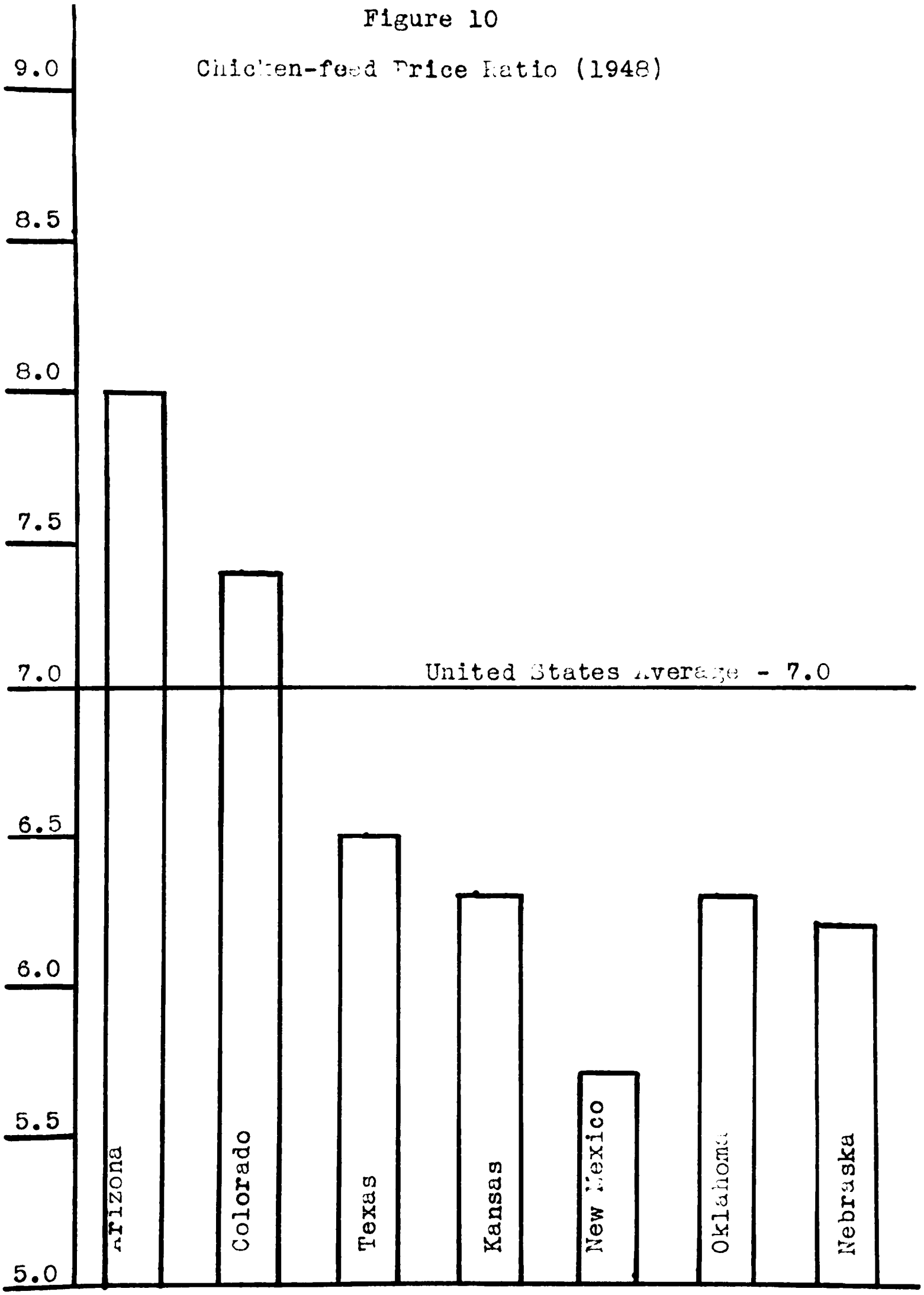


Figure 11

Chicken-feed Price Ratio (1949)

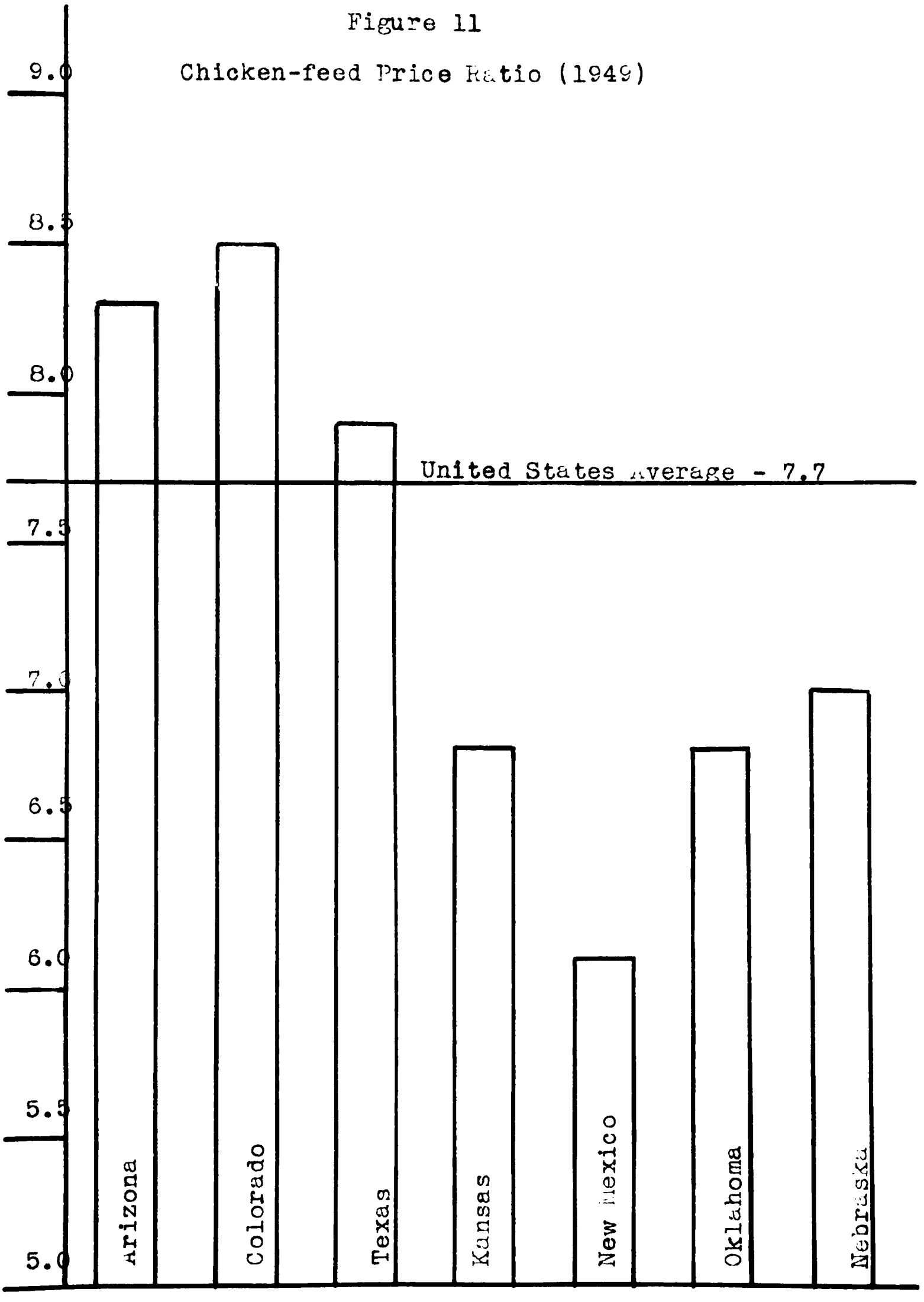
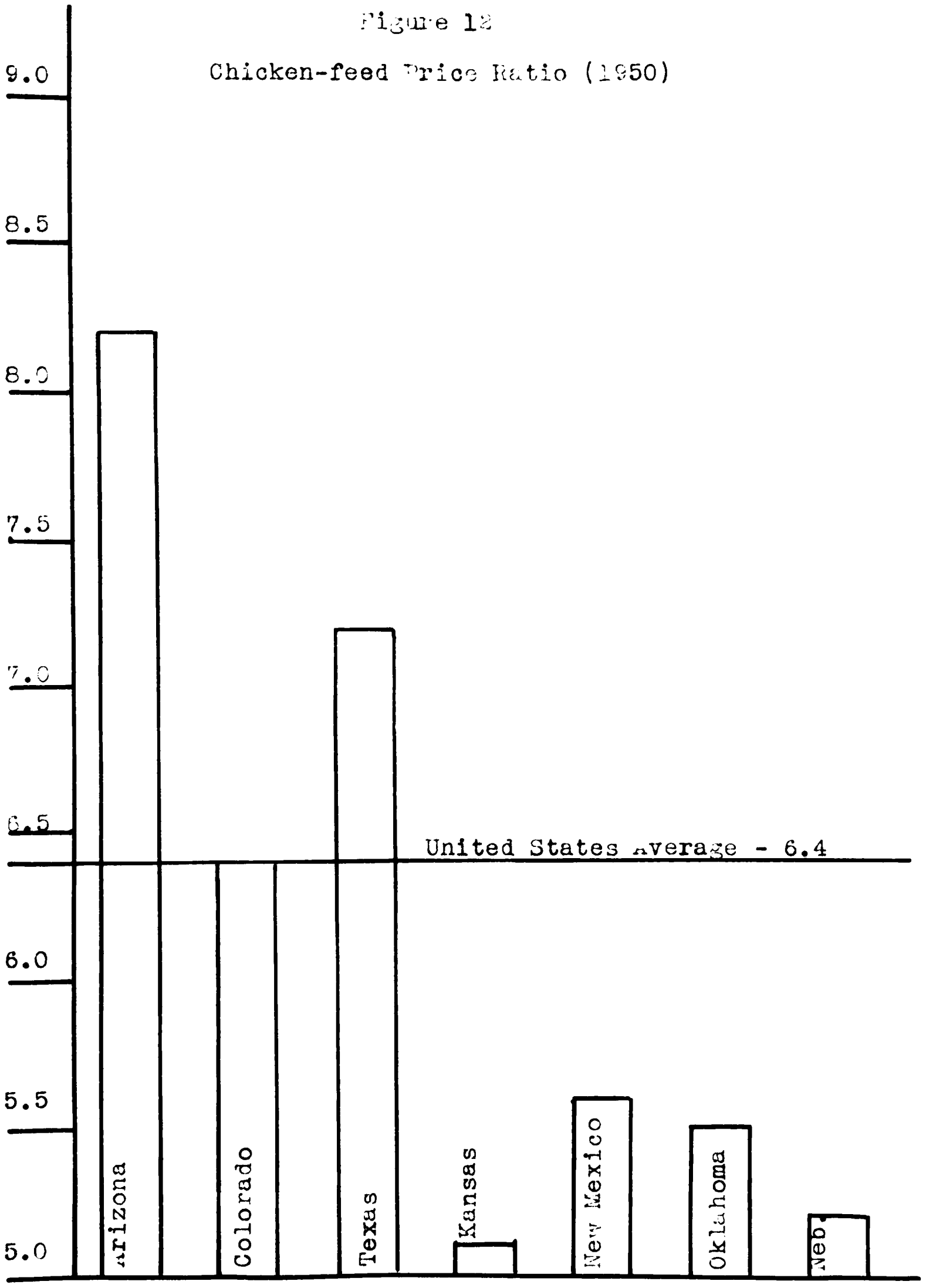


Figure 12

Chicken-feed Price Ratio (1950)



Egg-feed Price Ratio

The profitableness of egg production depends chiefly on the egg-feed ratio. This ratio is determined by the number of pounds of poultry ration equivalent in value at local farm markets to one dozen eggs.[3] An egg-feed price ratio between 12 and 13 is considered profitable. Even at a ratio like this, the farm flock may not be a profitable enterprise. Producers with large commercial flocks, on the other hand, may survive an egg-feed ratio drop because of the lower cost per unit of production.

The ratios for each state were determined by taking the ratios in the middle of each month, totaling them, and dividing them by twelve to arrive at an annual ratio.

In 1947, the egg-feed ratio was not too unfavorable to New Mexico producers. (Figure 13.) The average for the year was 11.7, which was better than the average for the United States and exceeded only by Arizona among the surrounding or competitive states. Fewer eggs were produced in the nation during the year, and as a result, fewer eggs were stored in the spring to compete with fresh egg markets in the late summer and fall months. The rate of consumption had continued to increase over previous years, thus causing a higher demand for eggs.

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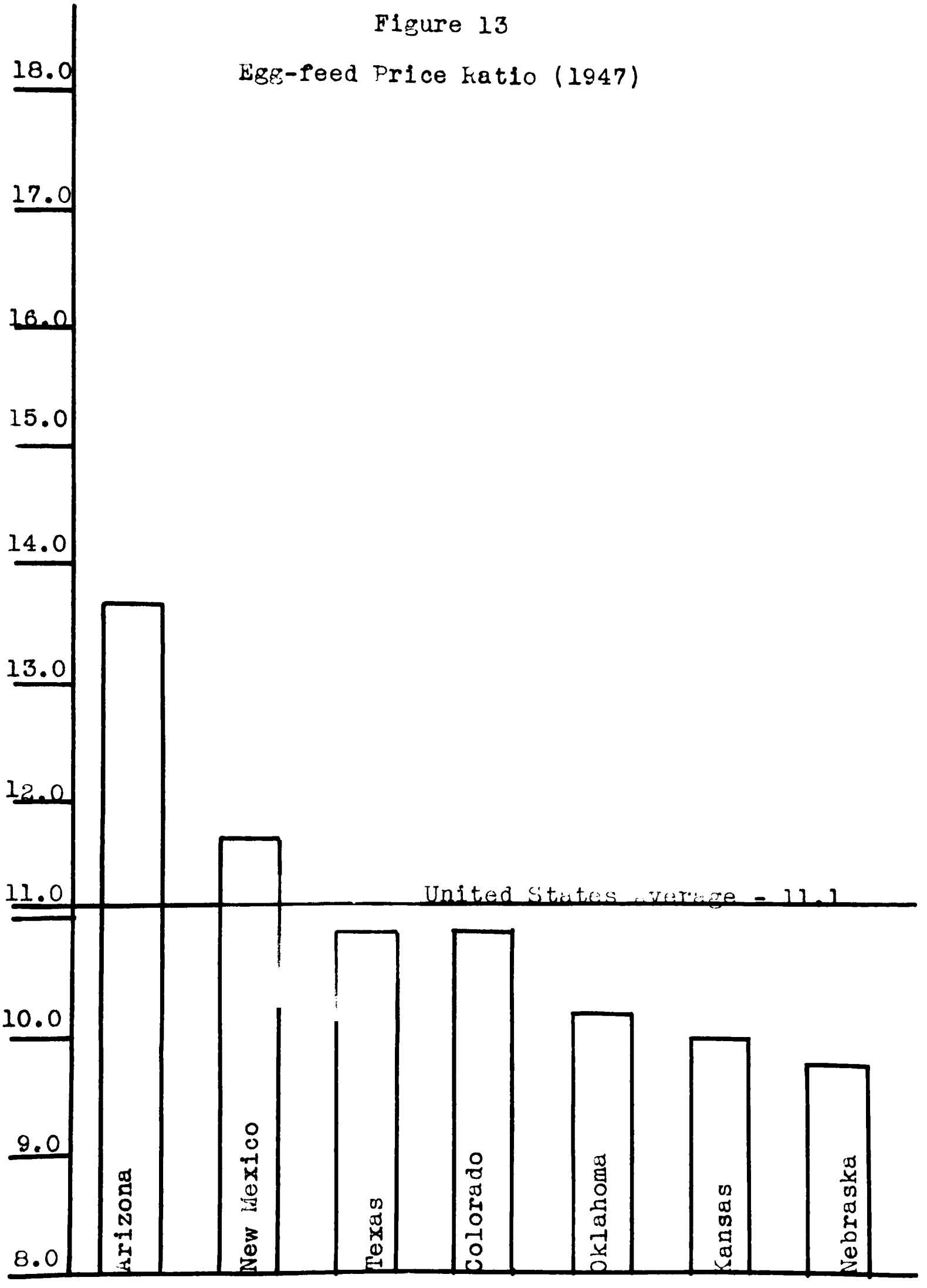
[3] Ibid, p. 126.

Figure 13

Egg-feed Price Ratio (1947)



The egg-feed price ratio for New Mexico was less favorable in 1948 than in 1947, although the United States as a whole had a better ratio. In 1948, New Mexico had an average of 11.2 (Figure 14), compared to 11.7 for the previous year. Nationally, the average had risen from 11.1 to 11.5. Again Arizona stood high for the group at 13.8. One probable cause for this slightly lower ratio is that feed prices in New Mexico rose about 2 per cent and production was increased slightly, therefore increasing the supply.

In 1949, New Mexico had a very favorable egg-feed price ratio, as shown in Figure 15. This was the most favorable ratio in New Mexico since 1945. The 1949 average in the United States for the egg-feed price ratio stood at 13.2. The ratio for New Mexico stood at 13.0, which was the most favorable for any of the surrounding states except Arizona and Colorado.

During 1949, New Mexico had a 9 per cent decrease in production (Figure 17), which probably accounted in part for this higher ratio. Another probable cause could be that the price of poultry feeds dropped considerably from 1948 to 1949. The rate of consumption decreased. Production in the nation as a whole decreased more than 2 per cent in 1949. Storage stocks at the beginning of the year 1949 were lower than they had been since 1944.

During 1950, the egg-feed price ratio dropped off to its lowest point for the four years used in this study.

Figure 14

Egg-feed Price Ratio (1948)

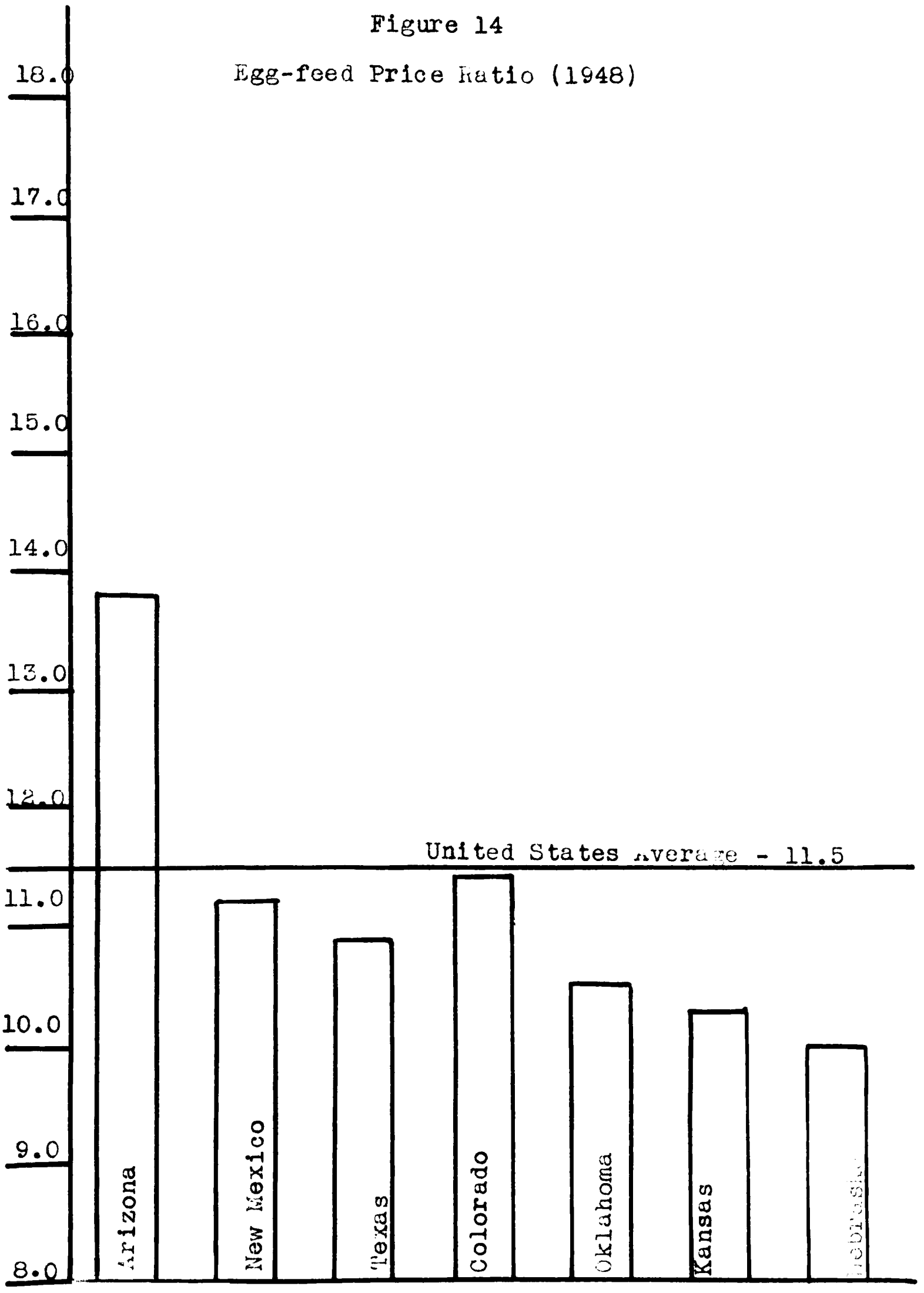


Figure 15

Egg-feed Price Ratio (1949)

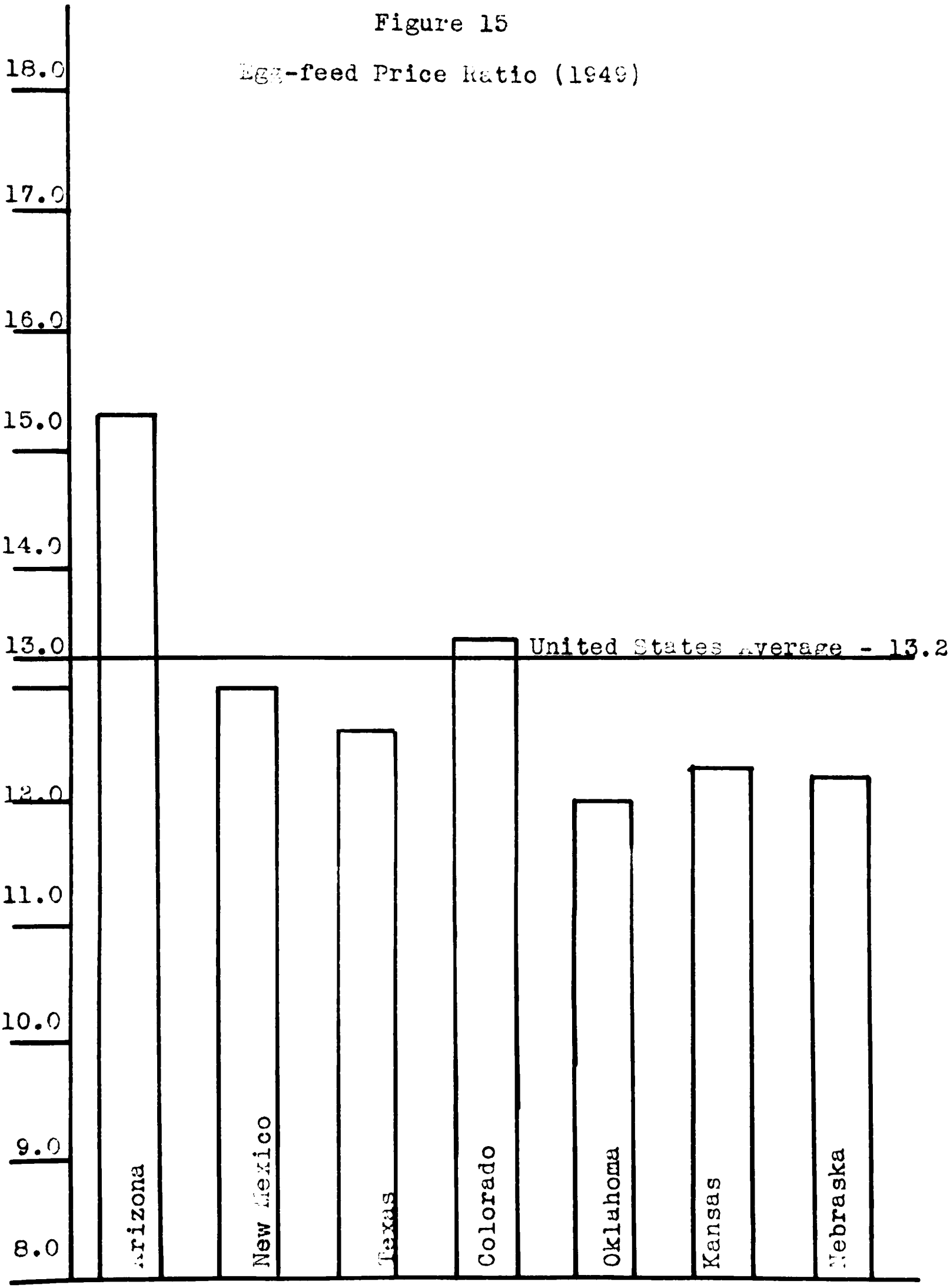
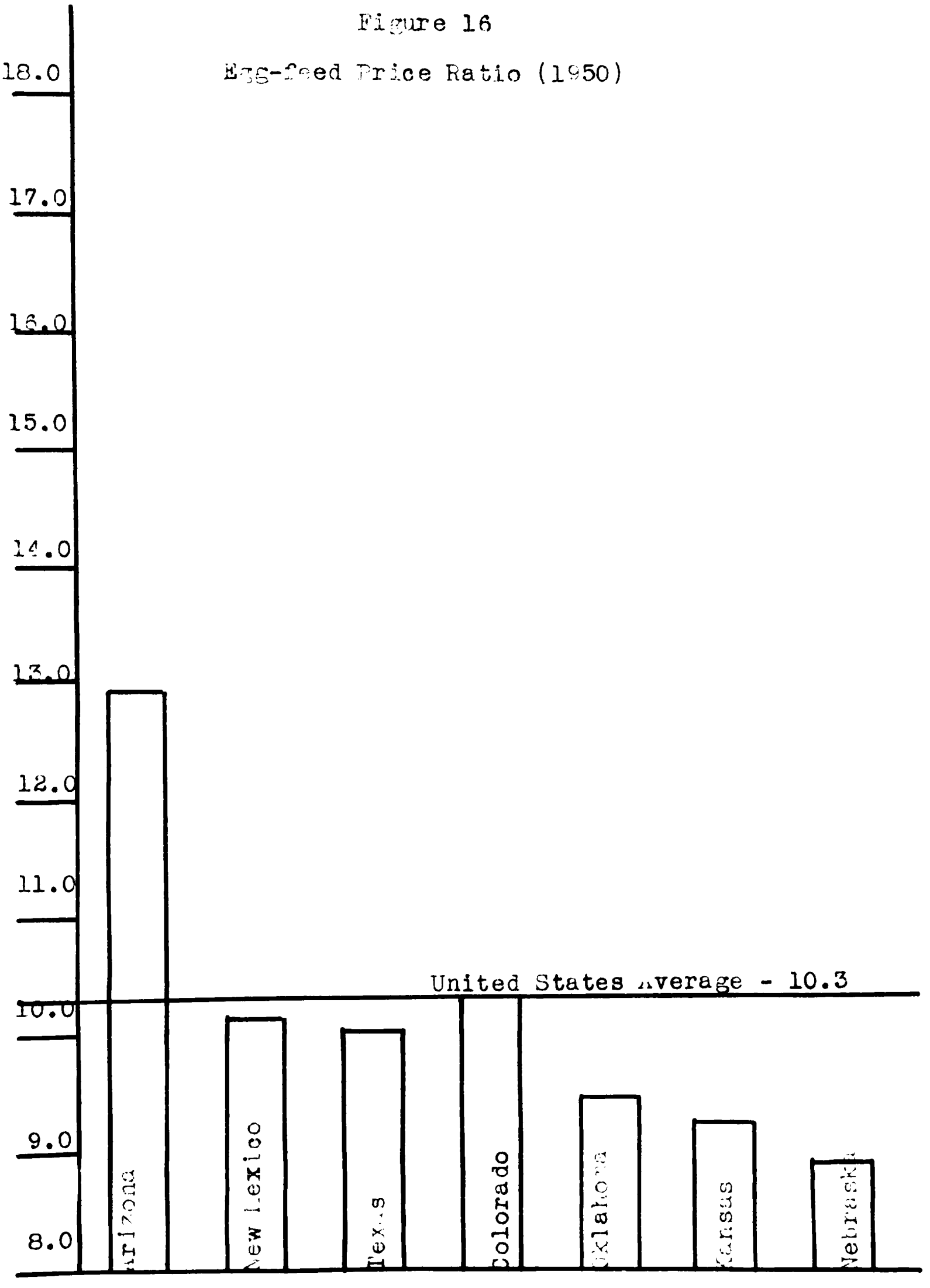


Figure 16

Egg-feed Price Ratio (1950)



The ratio for 1950 was 10.1 for New Mexico, while the average for the United States was 10.3. (See Figure 16.) Arizona still had the most favorable price ratio at 12.9 as a yearly average. The commercial storage stocks at the beginning of 1950 were considerably larger than the few years previous and therefore could have caused some of the lower prices received for eggs during 1950. Production for the nation as a whole increased 6⅔ per cent, (Figure 17) and feed costs increased slightly. All these factors could have had an influence on the egg price ratio for 1950.

Prices Paid for Poultry and Eggs

The prices paid to New Mexico producers for poultry have been unusually low for a number of years. In general, the western states are high-priced markets, but New Mexico, though it received a better price than some of the other states covered in this study, seems to be an exception.

In 1947, New Mexico producers received 24 cents per pound for chickens, while the average in the nation was 26.8. (See Figure 18.) Oklahoma, Kansas, and Nebraska received even less than New Mexico. Arizona received the highest average price for the group studied, with 33.7 cents per pound.

In 1948, there was an increase in prices paid the producer for his chickens. The average price paid to the producer in the United States was 30.6 cents per pound. Arizona was high for the group with 37.2 cents, and New Mexico

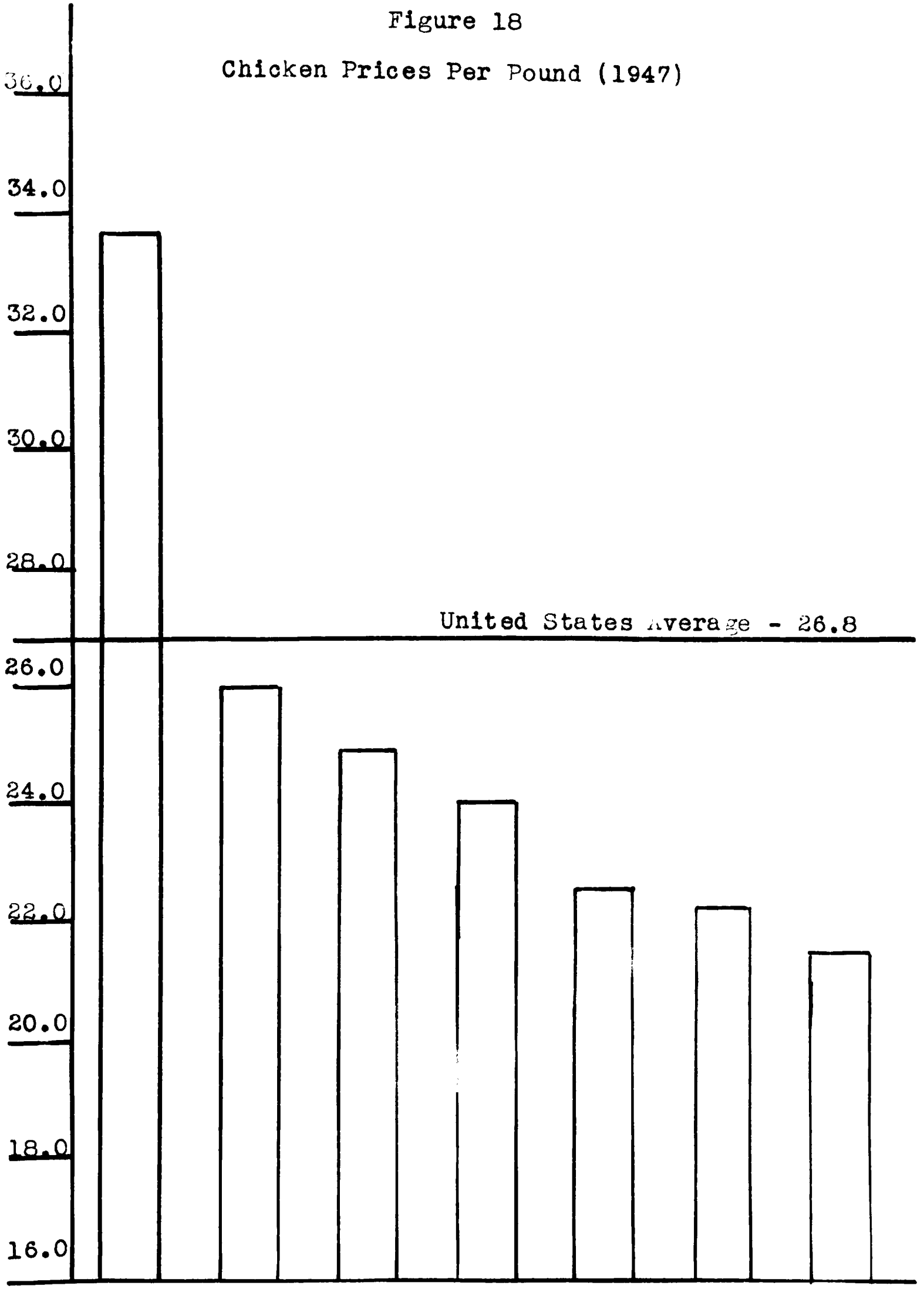
Per Cent Changes

In Production U.S.

Year	PER CENT CHANGES IN PRODUCTION N.M.	PER CENT CHANGES IN PRODUCTION U.S.	NEW MEXICO	UNITED STATES
1947	3% increase	Slightly less than 3% decrease	132,000,000	55,252 Million
1948	.75% Less than 1% increase	1.5% decrease	133,000,000	55,168 Million
1949	9% decrease	2.2% increase	121,000,000	56,382 Million
1950	.83% decrease	6.5% increase	120,000,000	60,046 Million

Figure 18

Chicken Prices Per Pound (1947)



producers received 25.8 cents, which was above the figure for Oklahoma, Kansas, and Nebraska. For comparisons, see Figure 19.

Market prices in 1949 were considerably below 1948 (Figure 20). The price New Mexico producers received for live poultry dropped from 25.8 cents to 21.7 cents per pound. The national average decreased from 30.6 in 1948 to 23.4 in 1949.

The market trend in 1950 was slightly upward from a year earlier. The average price paid on a national scale was 25.7 cents, and New Mexico producers received 23.2 cents (Figure 21). Conditions during all four of these years were unfavorable to poultry meat production.

Egg prices for New Mexico producers were fairly good in 1947 as shown in Figure 22. The average price paid to producers in the state was 46.4 cents per dozen. This was slightly above the national average and was exceeded by only one state in this study, Arizona. The position of the egg producer in 1947 was fairly favorable.

Again in 1948, the egg producers of New Mexico received a better price for their eggs than did any other state, with the exception of Arizona. Prices received by the producers of the state were higher than the previous year. The average was 48 cents per dozen. New Mexico prices were still above the United States average as shown in Figure 23.

Figure 19

Chicken Prices Per Pound (1948)

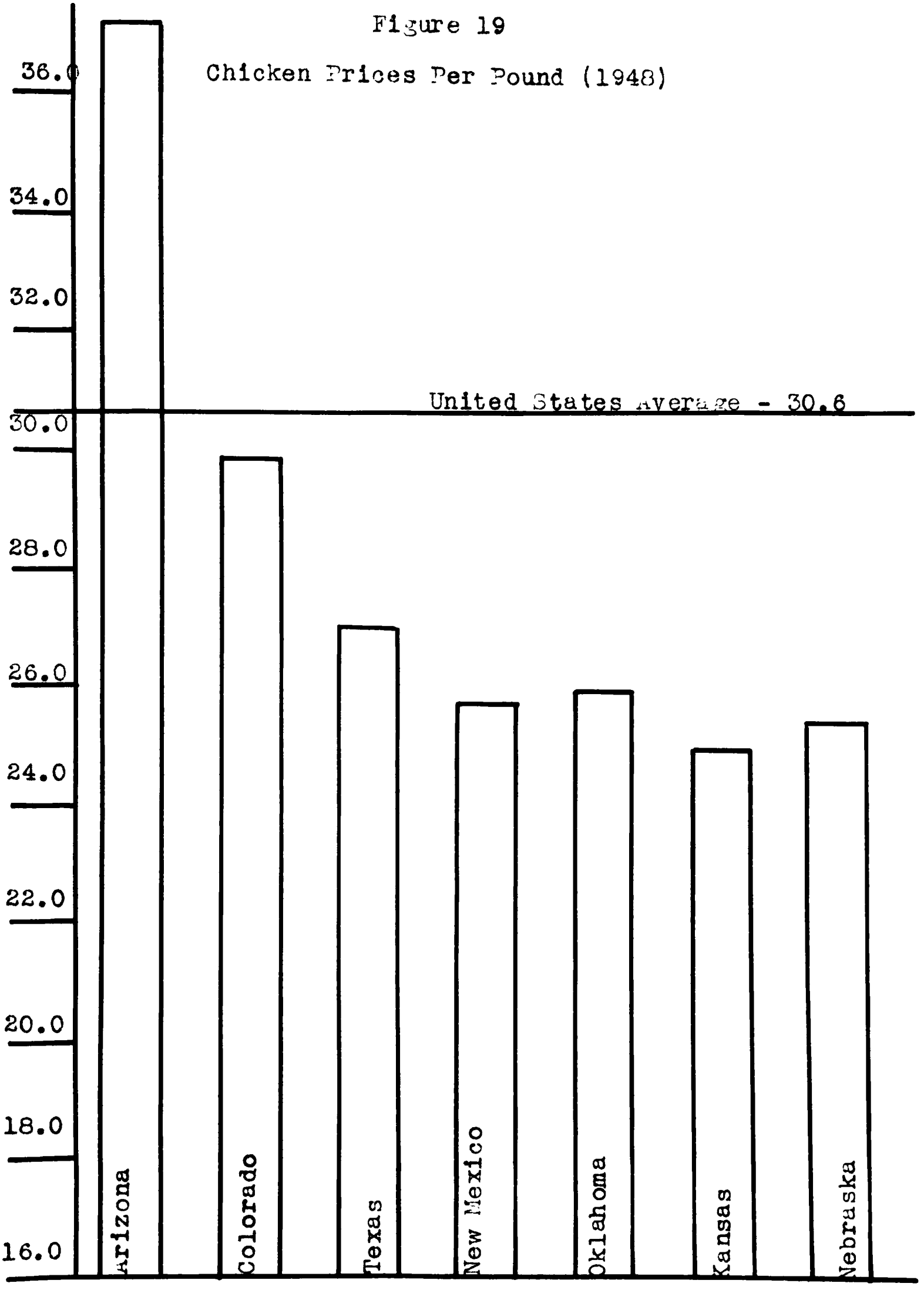


Figure 20

Chicken Prices Per Pound (1949)

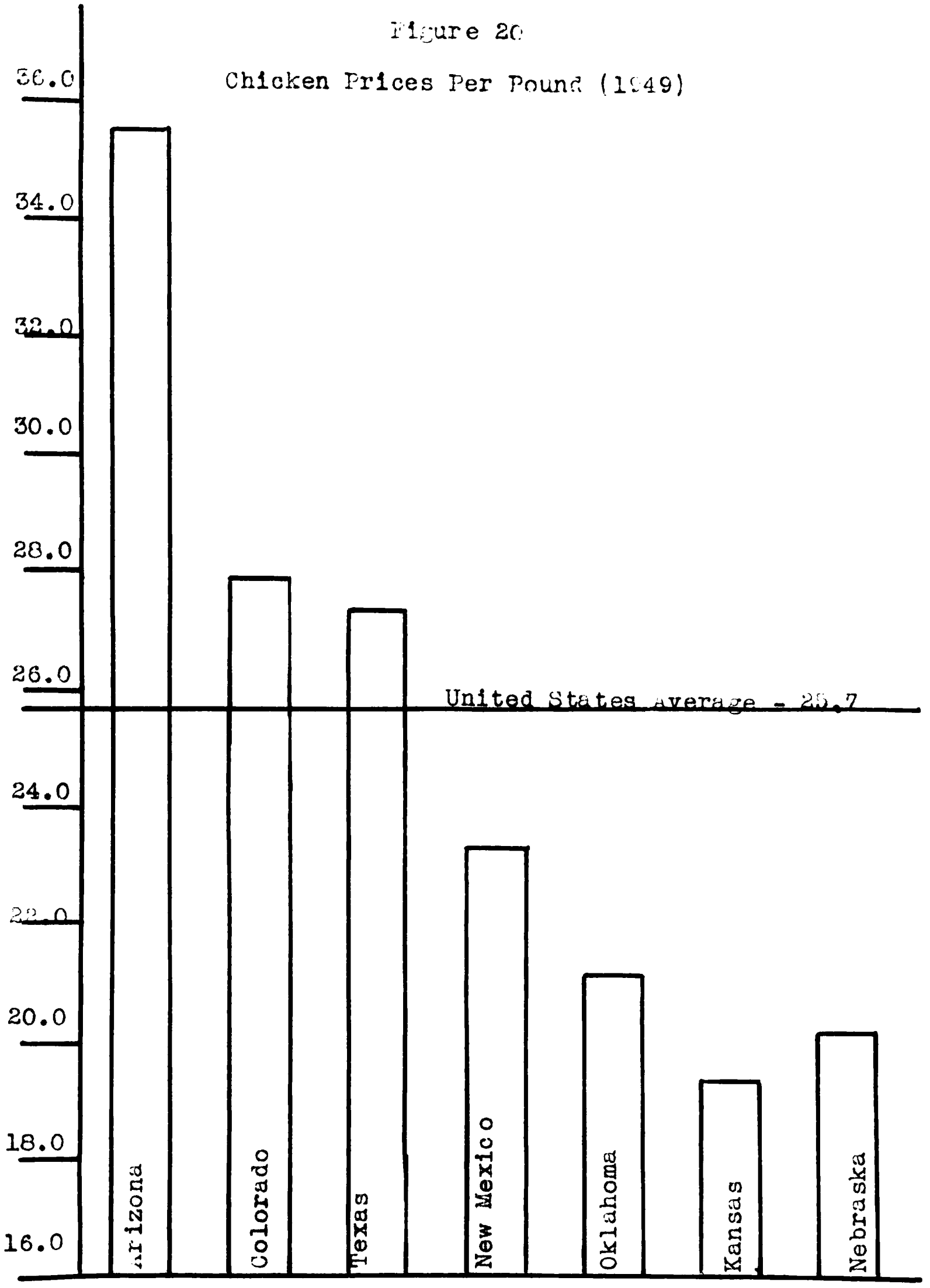


Figure 21

Chicken Prices Per Pound (1950)

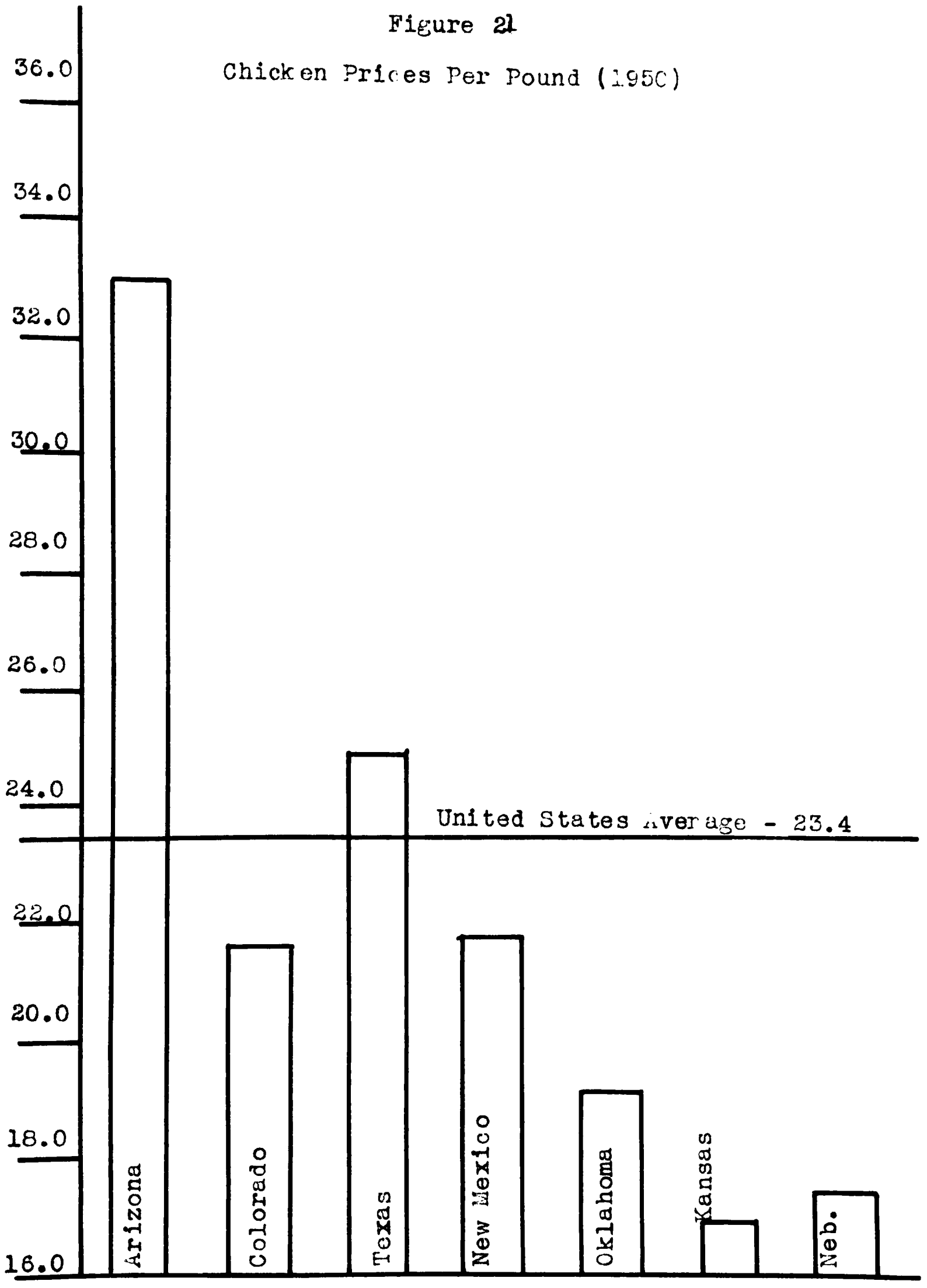


Figure 22

Egg Prices Per Dozen (1947)

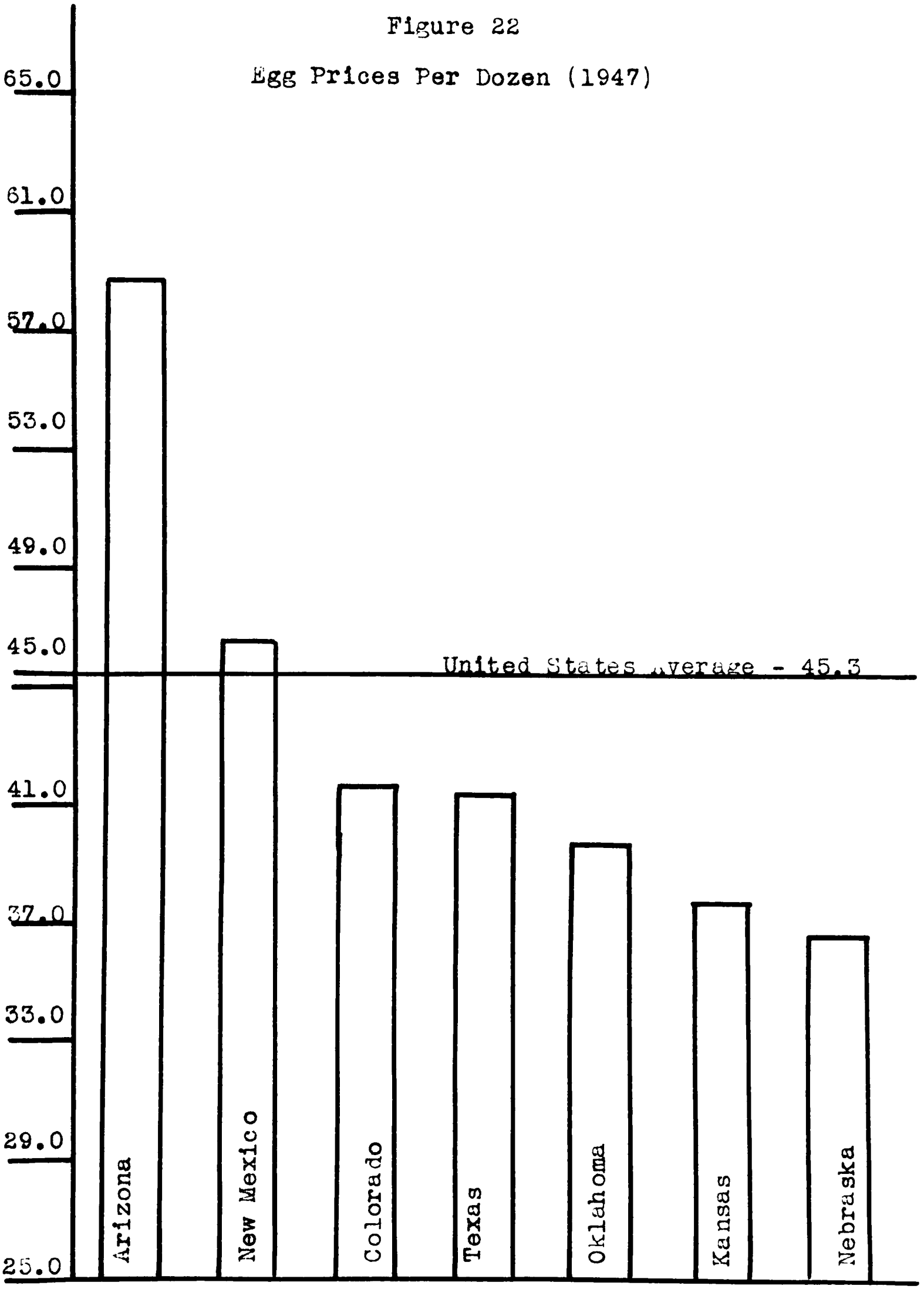
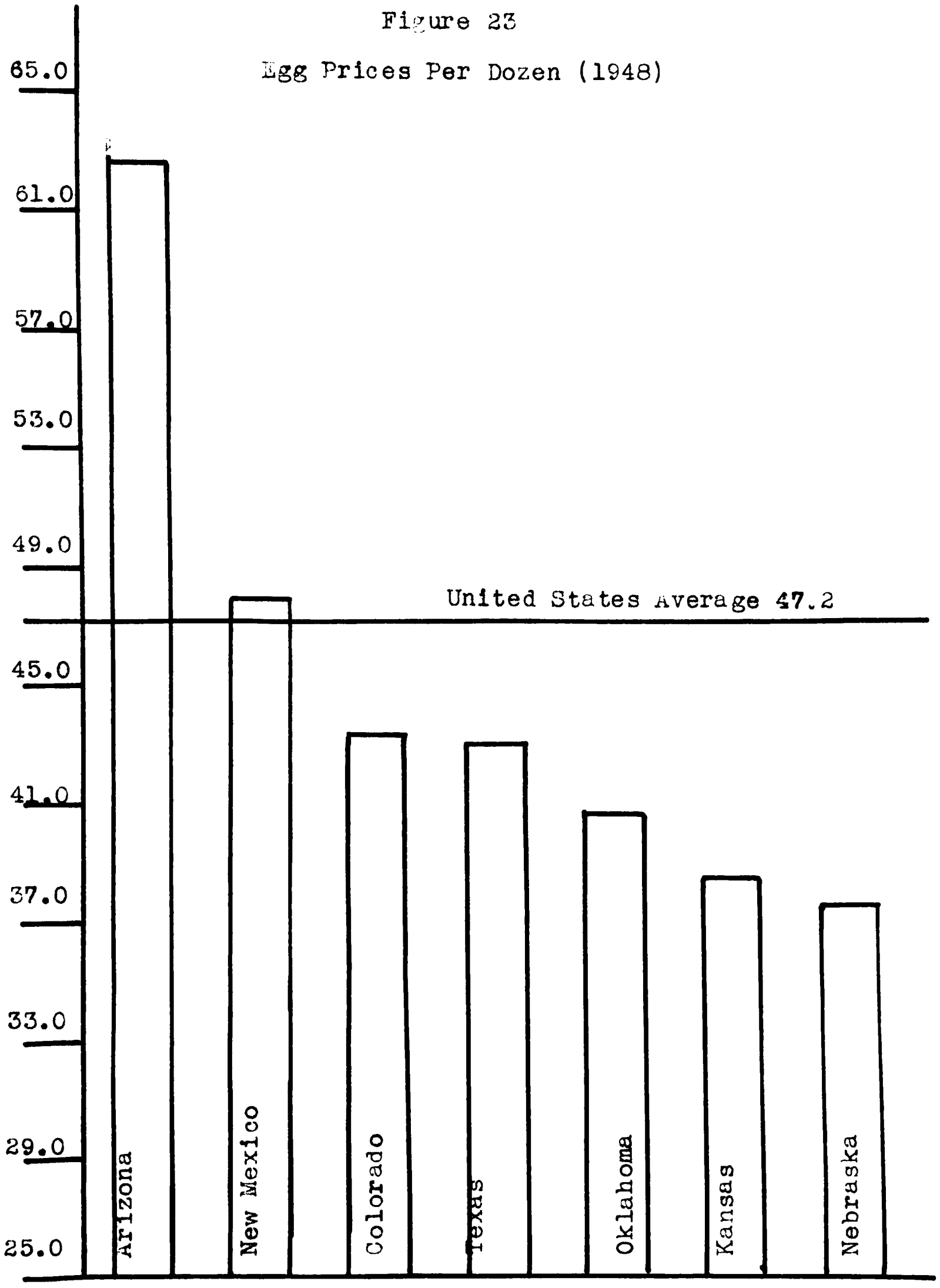


Figure 23

Egg Prices Per Dozen (1948)



In 1948, there was a slight decrease in the price of eggs. Producers received 47.9 cents per dozen in New Mexico, while the national average was 45.1 cents. (See Figure 24.)

A big decline in egg prices came in 1950. Egg producers received 37.5 cents per dozen for eggs during this year, which was 22 per cent below the previous year, and the lowest price received during any of the four years studied. (See Figure 25.) The first part of the year saw egg prices at very low levels. They were bolstered considerably by increased consumption in the latter half of the year. New Mexico was still above the national average and was exceeded only by Arizona in prices paid to the producer.

Weighted averages were used in determining the yearly average of prices paid for eggs. The use of the weighted average gives a more distinct picture of the over-all prices received. This average was found by multiplying the number of dozens of eggs sold each month by the average price per dozen received for the same month; then the total number of dozens of eggs was divided into the total price during the year.

Factors Affecting Price

Transportation costs are one of the important factors affecting prices of poultry and eggs in New Mexico. The farmers of New Mexico pay at least twice the national average freight rates for each ton of feed shipped into the state.

Figure 24

Egg Prices Per Dozen (1949)

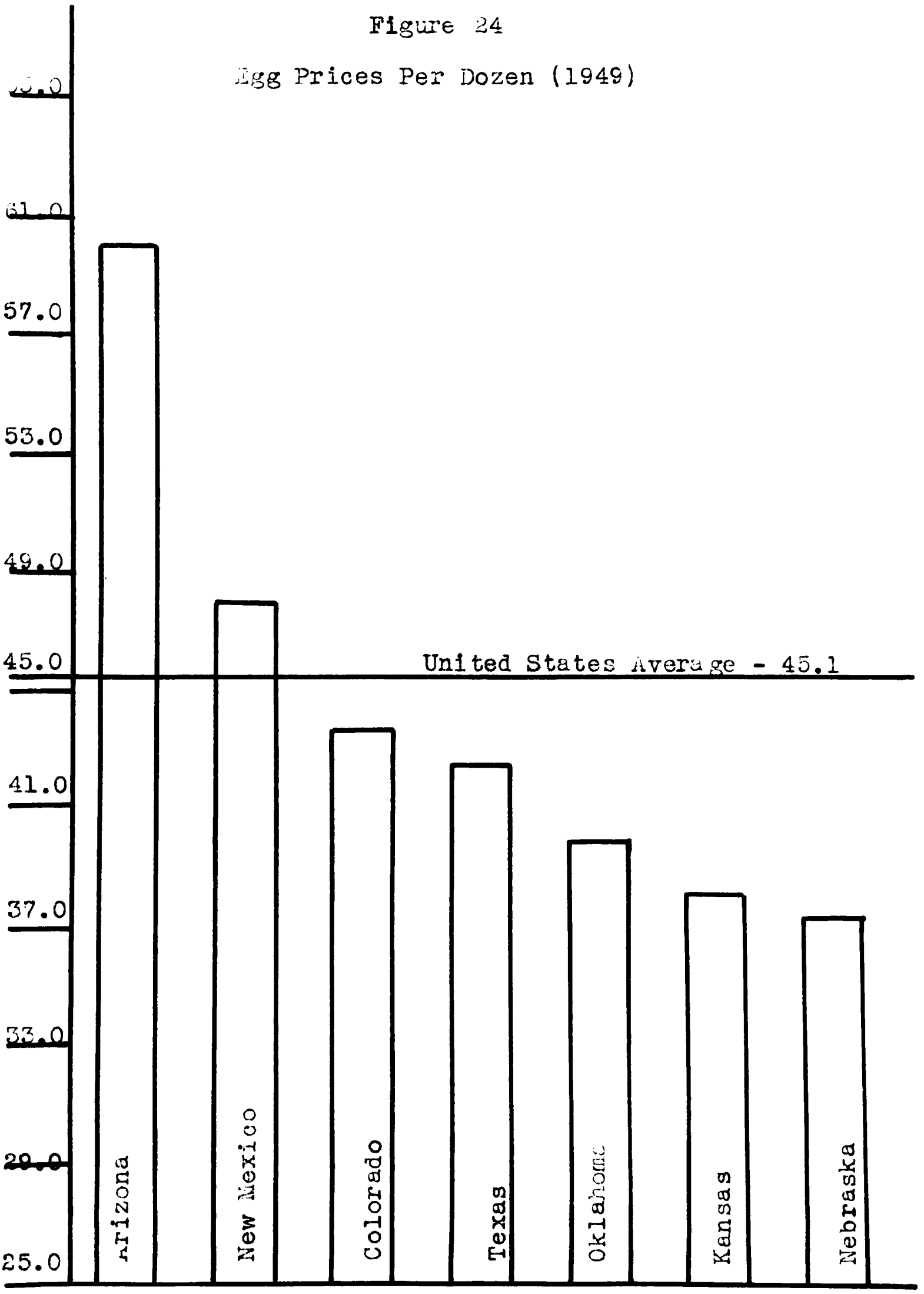


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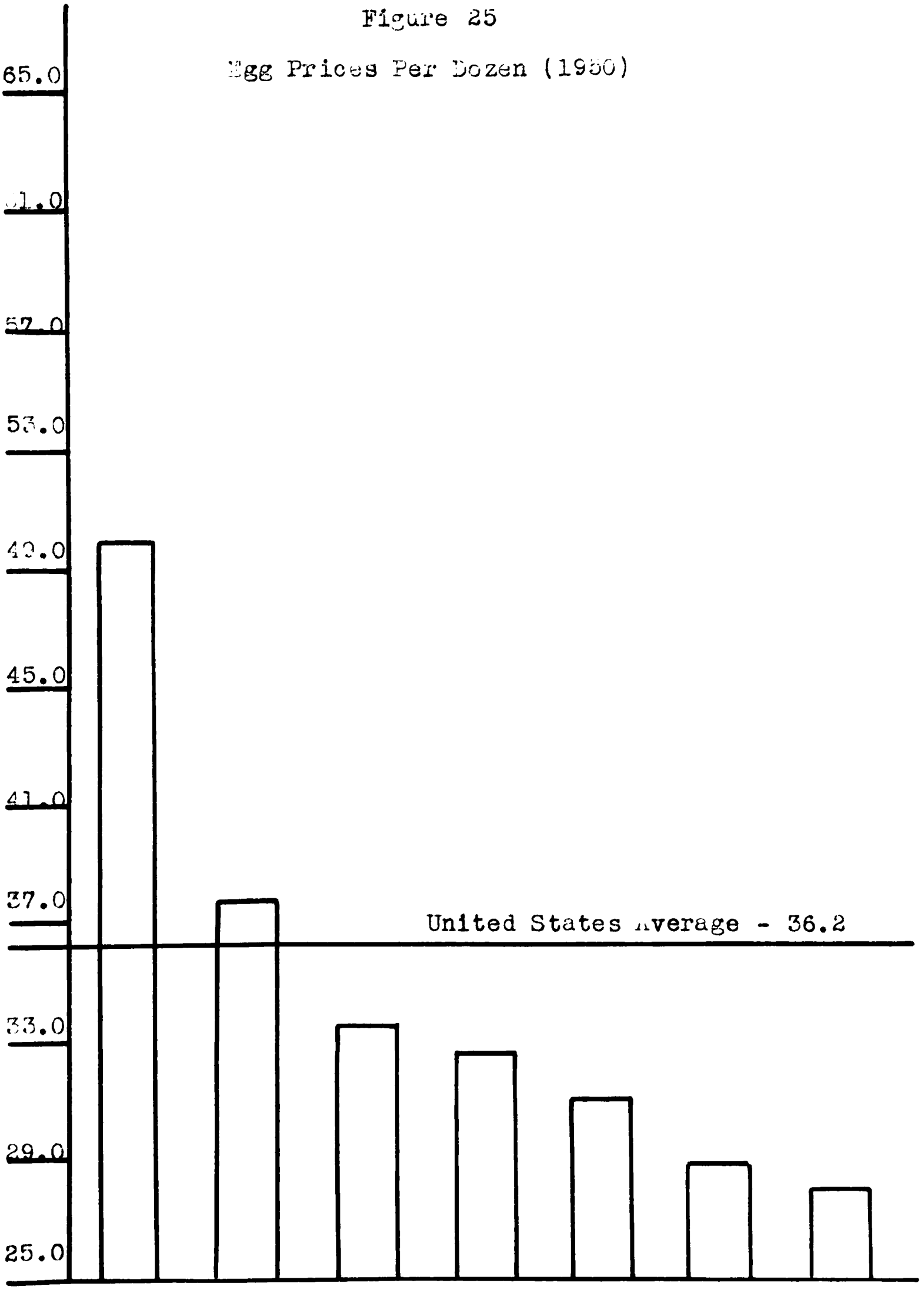
Figure 25

Egg Prices Per Dozen (1950)



There are two reasons for this high charge - - distance and high rates. As New Mexico is further from central markets than most other producing areas in the United States, one would expect freight rates to be high in New Mexico. However, the freight rates for livestock and feed in New Mexico are inequitable when compared with rates in other nearby producing areas.

New Mexico producers pay high freight rates because of the distance to central markets and because the state is located in a high freight rate zone. However, producers in areas competing with New Mexico do not pay as high rates as do New Mexico producers. When those competing areas have rate advantages, it hurts the producers of this state.[4] In 1951, a 100-pound bag of growing mash cost the poultryman in Albuquerque $1.12 more than the same feed cost producers in Fort Worth, Texas. Approximately 60 per cent of this extra cost was freight. Lack of competition among feed dealers accounted for the remainder of the extra cost.

Weather conditions play an important role in the prices received by farmers for poultry and eggs. Eggs are affected much more than poultry in this respect. Bad weather through the Midwest, the area where the largest per cent of eggs are shipped from, will have an immediate bearing on the

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[4] Freight Rates on New Mexico Livestock and Feed, Experiment Station Bulletin 346, (State College, N.M., 1948), p. 13.

price in New Mexico. Extremely cold weather in the Midwest can influence changes in the market fairly quickly because of the immediate drop in egg production. When these weather conditions change rates of production, the retail market reflects the changes usually within two weeks.

Production of poultry and eggs on both a state and national scale affects prices. In 1947, there was a 6 per cent decrease in production nationally (see Figure 17), and New Mexico producers received an average (weighted average) of 46.4 cents per dozen for eggs. The state increased its production 3 per cent for the year, but this production could not offset the decrease in the other states. The price average for the nation was 45.3 cents in 1947. In 1948, production increased slightly in New Mexico, but there was a decrease in national production; therefore, producers received a higher price in this year. Production in 1949 was up more than 2 per cent for the nation, but storage stocks had been so depleted that the production could not supply the demand fully enough to hold prices down throughout the year.

In 1950, production for the United States was up 6.5 per cent. During this year, the prices averaged lower than any other time.

Economic conditions in general affect the poultry and egg markets more than is usually realized. Increases in

consumption can be noted for 1947 and 1948, although there was a decrease in consumption in 1949. This could be attributed to economic conditions and also to prices. The condition of the economy of the nation as a whole was in a slump during most of 1949. In June, 1950, when the Korean War broke out, an immediate increase in consumption was noted. One principal reason for the increase in consumption was that the armed forces were expanded, and their consumption of poultry and eggs was much higher than civilian consumption.

Military personnel consumed approximately 50 per cent more eggs per capita than the civilian population, and with this consumption increase in the summer of 1950, the prices of eggs showed an immediate upward swing. General economic conditions were given a boost by the outbreak of war in Korea. Production of arms lowered the rate of unemployment. This is easily seen, especially during the spring of 1951. Normally, the price of eggs drops tremendously during the spring, but during this particular year, the price was better than average. Even with no support price in 1951, the prices remained fairly high.

CHAPTER IV

MARKETING POULTRY AND EGGS

Marketing Functions

The production of eggs and poultry is only the beginning of the operations necessary for delivering an edible product to the consumer. The farmer who feeds the hen that lays the egg, or feeds the broiler for meat production, and the agencies that take the eggs or chickens from the farm are both responsible for the success of the industry.[1]

The distributive functions performed by poultry and egg dealers are essential in the poultry industry. Of the functions performed by these specialists, those of assembling, grading, packing, transporting, storing, assumption of risk, financing, and distributing are of greatest importance.

Since eggs and poultry are generally produced in small units, the volume handled is too small and too irregular in quality to avoid frequent assembling into commercial units. The function of collecting at various stages of the process is an important part of distribution.[2]

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[1] E.W. Benjamin, H.C. Pierce, and W.D. Termohlen, Marketing Poultry Products, (John Wiley & Sons, Inc., New York, 1949), p. 228.

[2] Ibid.

During the processes of distribution, eggs and poultry are assorted as the demand requires. The value and quality is often determined when purchased from the farmer, although the majority of buying agencies buy eggs on a current receipts basis and poultry on a straight-run basis. The function of grading, especially in eggs, has become increasingly important since the passage of an egg grading law by the state legislature. (See Chapter V.)

The business of transporting or carrying the products is a tremendous operation in the poultry and egg industry, because of the specialty of production in some areas.

Storing has become extremely important in supplying poultry and eggs to the consumer. Production is not equal during all seasons of the year; therefore, some facilities are necessary for keeping a supply available to fulfill retail demand. Production is usually high in the spring of the year, and to regulate this oversupply during this period, distributors generally store a large quantity of eggs to supply the demand in the fall and winter months, when production is much lower.

The risk involved in handling perishable products for which the market price fluctuates is serious.[3] Ownership for even a few minutes in certain periods such as pre-holiday seasons may entail a considerable loss because of a change

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[3] Ibid.

of sentiment among the buyers; or natural conditions may cause the goods to deteriorate enough to result in a serious loss. The risk of credit losses, trade depressions, refusal by buyers, and the like, all make up some of the complexities of the middleman.[4]

There is a continuous ebb and flow of eggs and poultry among all parts of the state and the rest of the nation. The seasonal, geographic, and climatic conditions, as well as the changing desires of the producers and consumers, determine the rate and direction of this movement.[5]

Since most of the eggs sold at retail are received from out-of-state sources, the procedure and costs involved can be seen very clearly in this portion of the study. A survey was made with ten egg dealers, who were located in different areas of the state, to get an over-all picture of the marketing costs that were encountered in the process of serving the consuming public.

The consumption of eggs in New Mexico by counties (see Figure 26) is determined by the amount of population multiplied by 406, which was the average consumption per person in the United States during 1951. Production per county (Figure 27) was not nearly enough to supply the demand. A comparison of production and consumption (Figure 28)

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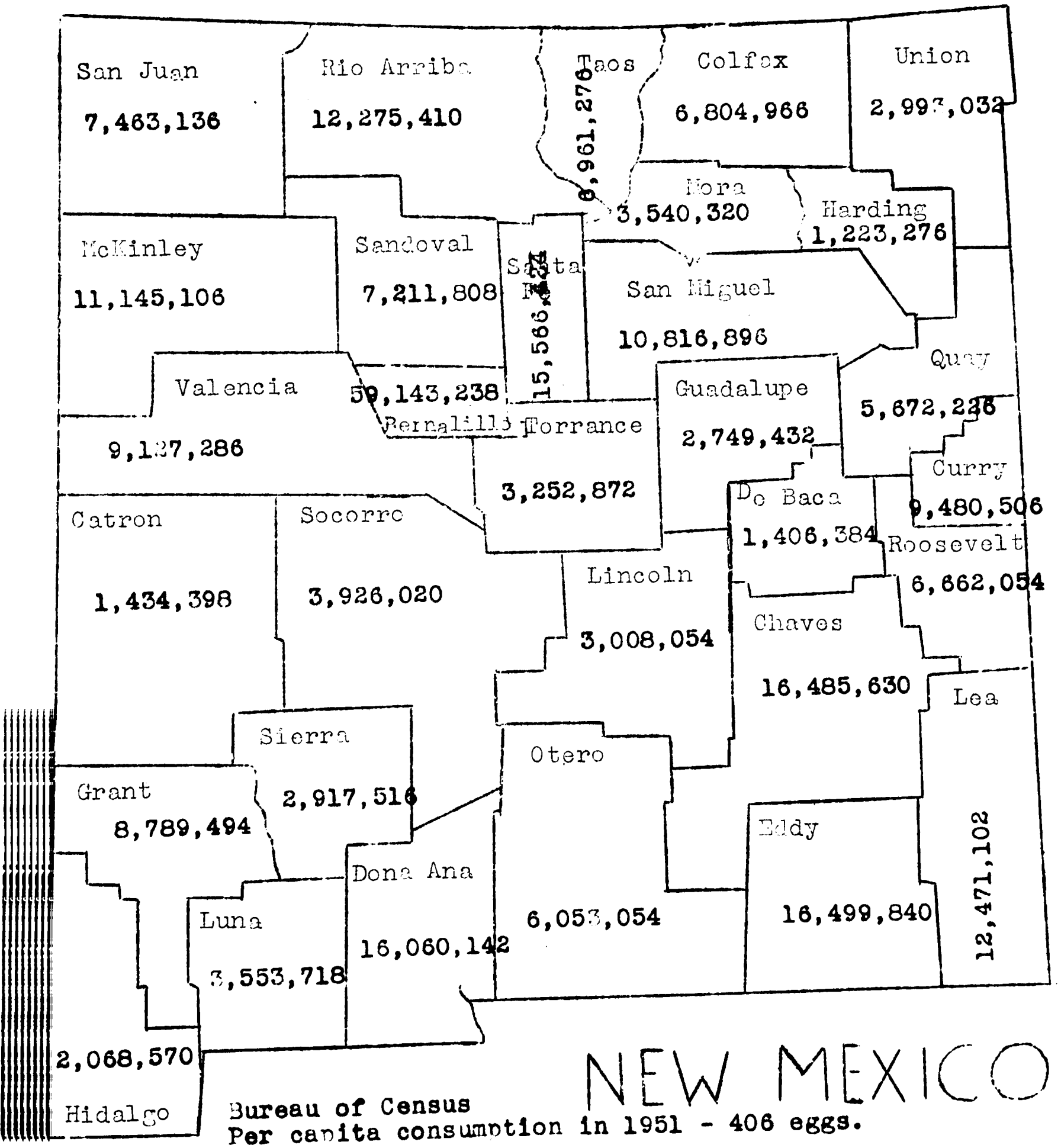
[4]Ibid, p. 229.

[5]Ibid, p. 230.

Figure 26

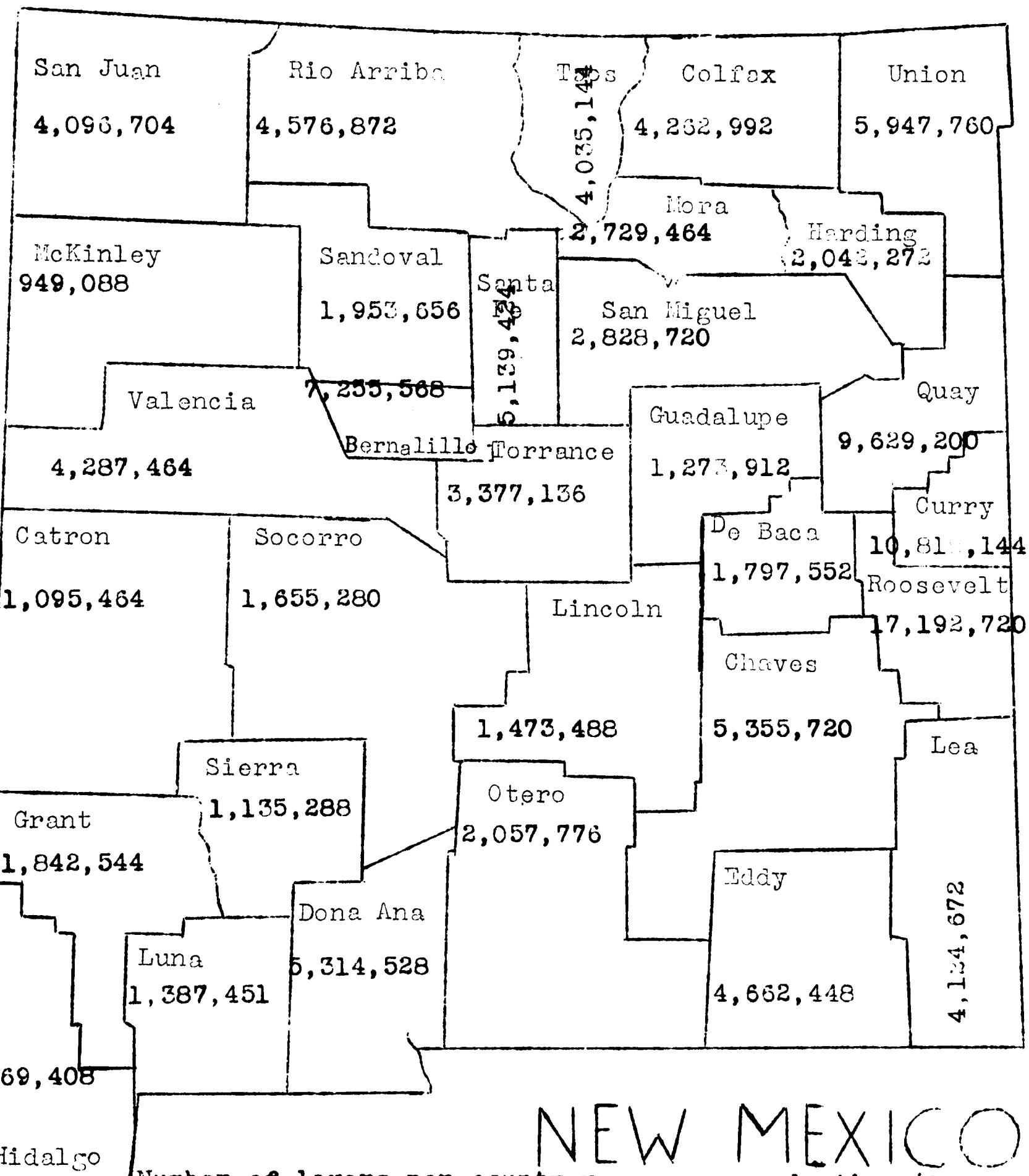
Consumption Per County



Bureau of Census
Per capita consumption in 1951 - 406 eggs.

Figure 27

Production by Counties

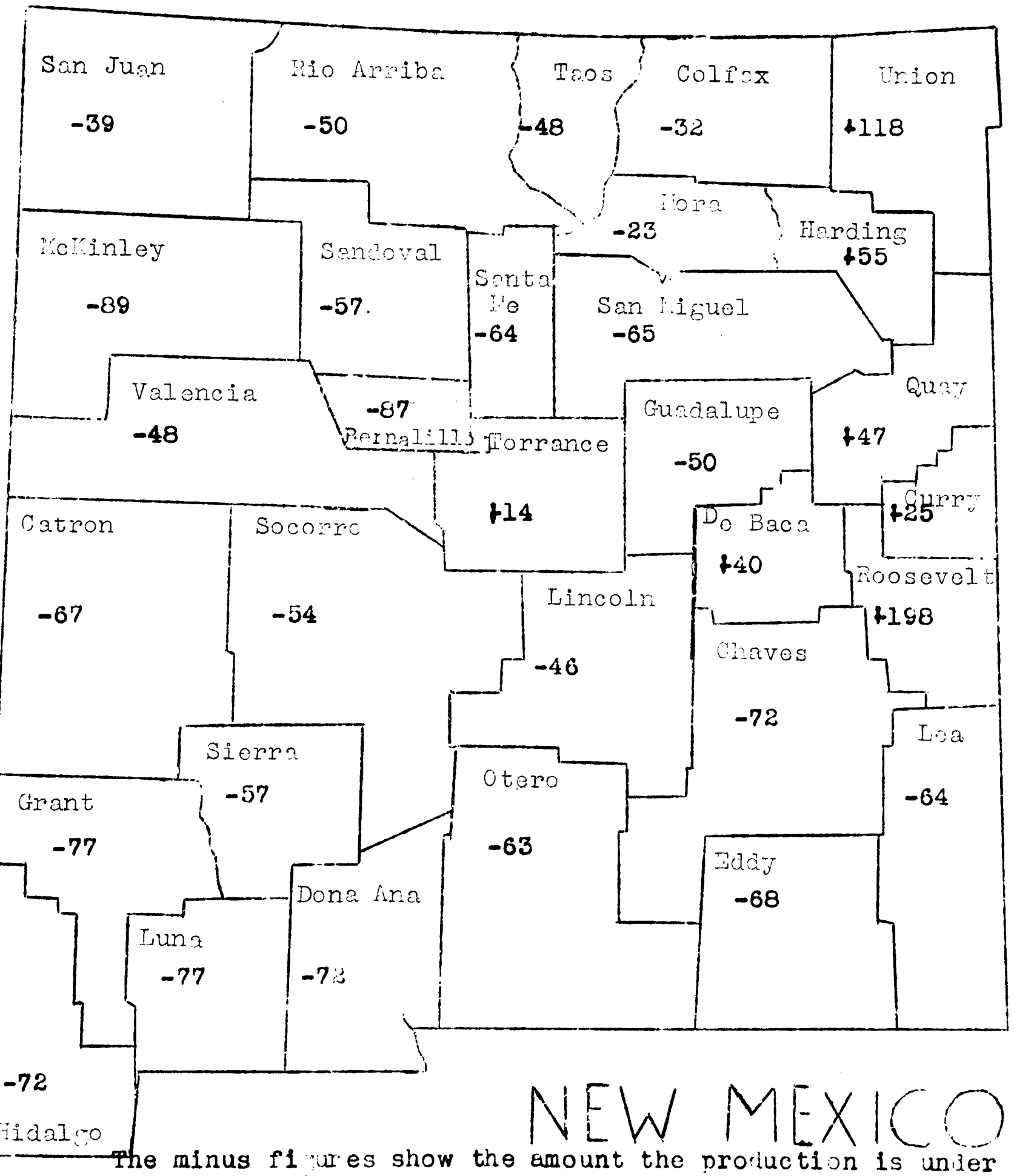


Number of layers per county x average production (15[illegible] eggs) per layer for New Mexico.

Figure 28

Areas of Production and Consumption of Eggs

in New Mexico



The minus figures show the amount the production is under the consumption per person. The plus signs show the amount of surplus over consumption. Based on consumption of 406 eggs per person.

in deficit areas shows the great need for efficient distributors of eggs.

Sources of Supply

Of the ten dealers reporting, a majority received 95 per cent or more of their eggs from sources outside the state. The remaining dealers brought 3525 cases of eggs into the state. The point of origin for most of these eggs was Kansas, with approximately 1850 cases being shipped from there each week. Next in the order of importance came Nebraska, with 1000 cases, followed by Oklahoma, Texas, and Colorado.

Kansas was the largest exporter to New Mexico because, as most dealers stated, a good source of supply is necessary at all times. In the past, they have tried to get a supply from a source much nearer New Mexico, but in the fall and winter months they could not depend on the local sources. The production was not uniform enough to supply them at a constant rate, and most dealers were dubious of the quality. They were of the opinion that eggs produced in hot weather in New Mexico, Texas, and Oklahoma did not retain their quality as well as eggs from the cooler regions. One dealer, not covered in this survey, was transporting eggs from South Dakota in the summer of 1951, to get a better quality.

The buying practices of most of the dealers were very much alike. A majority bought graded eggs most of the year.

although in the late fall and winter months, the amount of current receipts bought increased considerably. One of the group bought 100 per cent graded eggs, while one bought only 30 per cent of his eggs by grade. Some dealers did not buy either current receipts or graded eggs. They bought "re-handles," which are not graded according to quality and weight, but from which all cracks, leakers, and inedible eggs have been removed.

Some variations were noticed in the grading by different dealers. Seven dealers reported that, of all the eggs bought, 70 per cent graded out as "A" quality. Others reported 40, 50, and 60 per cent "A" quality. The average per cent that graded out as "A" quality was 56 per cent, "B" quality 27.5 per cent, and the amount that fell in "C" grade was 12 per cent.

A relatively small number of egg dealers sold any "AA" quality eggs to the retail market. All the dealers sold grade "A" eggs and most handled a few "B" grades, but the majority sold three different qualitites all the time. These were grades "A," "B," and "Unclassified." Bakeries received a large amount of undergrades from egg dealers, but many grocery stores in the lower income areas dealt mostly in undergrades because of the price differential.

Transportation Costs

Transportation is the highest single item of expense to the distributor of eggs. Average transportation costs for egg dealers in New Mexico is 85 cents per case. A flat rate per case is paid by some dealers, while other use their own transportation. The rate per case on transportation is figured on an average of 700 miles for delivery costs. The low on transportation costs is 50 cents per case, while the high is $1.10. Dealers using their own transportation figure depreciation on vehicles and equipment to arrive at a cost figure on transportation. Only four of the ten dealers used their own equipment for transporting.

The type of equipment most frequently used for transportation was the semi-trailer, with a capacity of nearly 300 cases of eggs. One dealer used a single truck with no trailer attachment for making short trips.

Handling Costs

All dealers regrade their eggs before they go to the retail markets. Even though most eggs are graded at their point of origin, regrading is necessary in order that the requirements of the New Mexico egg grading law be fulfilled. Of all the eggs bought, 56 per cent grade as "A," 27.5 per cent "B," and 12 per cent as "C" grade. This totals 95.5 per cent of all the eggs purchased. The remainder, which

is 4.5 per cent, is an average loss attributed to cracks, leakers, and inedible eggs.

Some variation in regrading costs is caused by dealers who pay graders on a different pay scale. Some graders are paid on a weekly basis, while some are paid by the case and some by the hour. The lowest grading cost per case was 25 cents, while the high was 50 cents. Average regrading cost per case was 36 cents or 1.2 cents per dozen.

With few exceptions, the cost of cartons runs about the same, at $22.50 per thousand. The average price for all ten dealers was $22.68 per thousand, thus raising the cost per dozen eggs to the consumer by 2.3 cents.

The labor involved in cartoning presents another cost to the egg dealer. The average cost in labor for cartoning is 17.9 cents per case or 0.6 cents per dozen. Variations in the costs of cartoning are fairly great. The low cost was 12 cents per case while the high ran 30 cents. This variation is due primarily to the different pay scales of the dealers. Dealers who use no labor do not charge the labor against themselves and consider all labor income as salary or profit.

Delivery costs are fairly stable at about 20 cents per case for most of the dealers. The high was 50 cents per case and low for the group ran 15 cents. Average for all dealers was 22.75 cents per case or 0.76 cents per dozen.

Considerable variation is evident in the amount of profit per case the dealers were receiving. The amount of profit the dealers received depended largely on the volume handled. The large volume tended to cut down the markup per case. Dealers handling over 500 cases per week had the lowest markup per case. The highest markup per case was $2.50, while the low was $1.05. Average for the group was $2.10 per case.

The New Mexico Egg Grading Act was passed in February, 1951. The act provided for the grading and stamping of all eggs sold at retail, with the exception of those dealers who bought less than ten cases a week directly from farmers or producers who sold less than five cases a week directly to consumers.

Dealers were equally divided on the question "Has the New Mexico Egg Grading Act helped business?" However, most dealers were of the opinion that, during certain parts of the year, the law was helping business. During the summer months, business had been better than usual.

Handling Facilities

A majority of the egg dealers had a cooling system within their own plant. The dealers who did not have cooling facilities did have arrangements made with local locker plants to store their eggs.

Only two dealers process any eggs for their own use. Neither of these dealers store as many as 1000 cases each season. Even though only two dealers process eggs, all the dealers handled processed eggs at some time of the year. None of the dealers marked the processed eggs as such when they sold to retail markets.

Very few dealers store any eggs. Since the supply is generally limited, the storage of eggs in New Mexico is impractical. Facilities for storing are also very limited to the dealer. The cost of construction of storage plants is the principal reason that there is not a great amount of storing.

Other Products Handled

Only one dealer of the group dealt strictly in eggs. All the dealers, with this one exception, handled products which could be handled as a related market item. The most popular product handled was poultry meat. A majority of the dealers handled poultry meat. The next products of importance were oleomargarine and frozen food products.

Products that required about the same type of handling were fairly important as a source of income for egg dealers.

The amount of income derived from the sale of other products was not discussed with the egg dealers, although the indication was that the related items were not, in

any case, substantial enough to warrant a great amount of consideration.

Capital Investments

Variations in the amount of capital invested can be attributed to several different things. Dealers that use their own vehicles for transporting eggs into New Mexico have higher capital investment than those that contract for transportation. Ownership of buildings is another factor that increases the capital investment. Facilities for grading, storing, and delivery are also important in arriving at the amount of capital invested by each of the dealers. (See Figure 29.)

Producer Marketing of Eggs

There are four general types of marketing that are used by New Mexico poultrymen: producer to consumer, producer to retailer or restaurant, producer to wholesale egg dealer, and producer to country storekeeper.

The producer to consumer marketing is not carried on to a great extent. This type of operation involves a considerable amount of time and small sales. Only in the larger consuming areas, where a number of backyard flocks are found, is there much direct marketing. Some of the large producers sell a good quantity of their eggs to consumers who come to the poultry farm and purchase eggs.

Figure 29

Costs and Investments of Egg Dealers Surveyed

	HIGH	LOW	AVERAGE
Transportation Costs	1.10	.50	.855
Regrading Costs	.50	.25	.36
Cost of Cartons	.795	.645	.681
Cartoning Costs	.30	.12	.179
Delivery Costs	.50	.15	.227
Cost of Stamps	.10	.10	.10
Profits Per Case	2.50	1.05	2.10
Total	5.34	2.81	4.53
Capital Investments	40,000	2500	16,000

Producer to retailer or restaurant is one of the most popular types of marketing done by New Mexico poultrymen. The prices received are often nearly as good as those for deliveries direct to the consumer, and this method has the advantage of requiring fewer deliveries, with a larger volume in each. Practically all the large producers near high consumption areas use this method. Some have outlets with local milk plants, where the eggs are delivered along with the milk, although practically all the producers of any size have arrangements with retailers by which their eggs are placed in the store and the supply is replenished by the producer. This gives them a steady year-round outlet for their eggs at a better-than-average price.

In the eastern part of the state, there is quite a bit of selling done from the producer directly to the egg dealer. In this surplus area, there is not too great an opportunity for the producer to market to the higher price outlets because of the higher competition from other producers. Such a method of sale requires considerably less effort on the part of the producer, as he does not have to establish and maintain contacts with the consuming trade. When the dealer buys on a graded basis, this type of marketing has proved very satisfactory.

The last type of marketing is from producer to the country store. Many of the market eggs produced on general farms in the eastern part of the state are sold to the country

store. This type of marketing is often on an exchange basis: the producer sells his eggs to the store and then buys commodities needed on the farm. When eggs are bought on this basis, payment is solely on the number of dozens of eggs delivered, without respect to their quality or the percentage that is good or bad. Such a system offers no incentive to the careful farmer to produce good eggs, for he receives no more than does the careless producer whose eggs are of poor quality.

One type of egg marketing not mentioned in the above group is that of supplying hatching eggs to commercial hatcheries. Its importance is not too great except in the spring of the year, or during the hatching season. This type of operation is also limited to egg producers on the east side of the state, where the large hatcheries are located. The only producers participating in this method of marketing are those with some standard variety of chickens for which there is a demand. Hatchery purchases have helped many of these producers financially. A premium is paid for the eggs by the hatchery in a season when egg prices in general are at their lowest point.

Poultry Marketing

The majority of poultry sold to consumers in New Mexico is grown in other states. According to the United States Department of Agriculture, New Mexico produced only

40 per cent of the amount that was consumed in the state in 1951.[6]

Large meat packing companies are the most important figures in the poultry marketing industry. They are located centrally enough to cover all sections of the state. This, together with the fact that their deliveries also include other meats, cuts down the costs on delivery and storage. The poultry handled by these packing companies comes from high production areas and goes through company plants for processing. From the company processing plants it is delivered, either frozen or chilled, to the centrally located plants for distribution in New Mexico. There is no processing done at any of the large plants in New Mexico and no live poultry bought by any of these firms within the state.

Of lesser importance, as far as volume is concerned, is the local poultry dealer. Most towns of any size have a poultry dealer who buys live birds from farmers and processes them for the retail markets. These dealers buy from local producers, but must have marketing agreements elsewhere to be assured of adequate supplies at all times, since local production is very seasonal. Most local dealers have agreements with growers in Arkansas, Kansas, and Texas, where the

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[6] Marketing Farm Poultry, Farmers Bulletin No. 2030, (U.S. Dept. of Agriculture, U.S. Government Printing Office, Washington, D.C., 1951), p. 5.

order is placed each week for the number of birds or pounds they need. Under this arrangement, the dealer can specify the weight of bird he needs to satisfy his trade best.

Both live and dressed poultry are purchased by the poultry dealers. Their buying depends on their slaughtering facilities. The percentage that is bought, live or dressed, from out-of-state sources, tends to lean slightly toward dressed poultry.

There is much less specialization on farms in New Mexico in raising market poultry than in producing eggs. In most areas of the state, market poultry is incidental to egg production. In general, two types of birds make up a majority of the poultry marketed: hens that have been culled from laying flocks and broilers. A large percentage of the broilers marketed are from chicks bought for replacement laying flocks and the male birds sold when they reach market size.

The marketing of poultry in New Mexico is fairly seasonal in character except for the few commercial broiler growers who are in continuous production throughout the year. Most of the broilers or fryers reach the market in May and June. Most of the hens are marketed during late summer and fall at the end of their laying season, unless the prices for eggs drop extremely low in the spring. When this occurs, heavier spring marketings are noticeable.

Farm poultry is marketed in three general ways by most producers: producer to consumer, producer to poultry dealer, and producer to country store.

Both live and dressed poultry are marketed by producers direct to consumers. The quantity sold in this way is relatively small. The prices received are usually better than prices received through other methods of marketing, but the costs are also higher. Most of this type of marketing takes place during the spring of the year, when producers are selling the cockerels from replacement stock.

By far the most common method of marketing poultry is selling direct to poultry dealers. Producers contact the dealers when their birds are ready to be marketed, and the dealers look over the group of chickens. Each dealer quotes a price, and the producer sells to the highest bidder. The purchasing dealer then picks up the birds at the farm, or the farmer may have to deliver the birds to the plant. Many producers never look at a market report and have to take the prevailing price when they take chickens to the market. This is the usual procedure that most small poultry producers follow. Marketing from producer to poultry dealer is advantageous in that less labor is required and dressing equipment is not necessary, but the price received is not equal to that paid when poultry is sold directly to the consumer.

Of least importance in New Mexico poultry marketing channels is that of producer to country store. A small amount

is done in the eastern part of the state, where the grocery store will buy hens culled from laying flocks. Although this has been more important in years past, it is rapidly becoming extinct.

Commercial broiler producers sell to restaurants, consumers, and retailers. Some of those who have their product established deal primarily with consumers. Even though consumers and retailers buy a large amount of the broilers from commercial producers, restaurants and hospitals are important. Practically all the commercial broiler production is located in the eastern part of the state. The principal reason for most of the broiler industry being located there is that the prices of poultry rations are much lower there than in other sections of the state.

CHAPTER V

EFFECTS OF THE NEW MEXICO EGG GRADING LAW

Purpose of the Law

The compulsory grading of eggs has increased tremendously in the past few years. Forty-six states now have laws governing the sale of eggs at retail. The only two states that do not have regulations affecting their sale are Texas and Arkansas. The New Mexico egg grading law, which became effective July 1, 1951, has had a great effect on the quality of eggs marketed. In setting up this law, the sponsors had several purposes in mind. More specifically the act was:

> to promote the development of the New Mexico egg industry: to define types of eggs; to prohibit the sale of eggs unfit for human food: to encourage greater consumption of eggs by preventing deception in their sale at wholesale or retail, and by adopting federal standards for individuals eggs; to define candling; to provide penalties for the violation of the act; and to repeal secs. 71-615, 71-616, 71-617, 71-618, 71-619, 71-620, and 71-621 and 71-622, New Mexico statutes 1941 annotated (being chapter 227 New Mexico session laws of 1927, as amended by chapter 161, New Mexico session laws of 1939.)[1]

The purpose of the law was to prevent the sale of inedible eggs to the consumer. The law states:

> that no persons, firm, or corporation shall sell or have in his possession with the intent to sell, offer or expose for sale, or traffic in, any egg unfit for human food, unless the same is broken in shell and then denatured so

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[1]The New Mexico Egg Grading Law, House Bill 264, Approved March 26, 1951, p.1.

that it cannot be used for human food.[2]

From a consumer's standpoint, the purpose of the law is excellent; however, it is hardly possible for all requirements to be met by egg buyers. First, the volume of eggs brought into New Mexico is so great that it is impossible to prevent some inedible eggs from being brought into the state, and many times, when current receipts are bought, there may be a few inedible eggs in the group, unknown to either the buyer or seller. Leniency on the part of the Egg Inspection Department has allowed the buying and selling of eggs between dealers to take place without compulsory grading. Only when the eggs reach the retail channels are they subject to inspection. Secondly, it is practically impossible to enforce the law regarding certain markings. Eggs that have been in cold storage for more than thirty days are required to be marked as cold storage eggs, even though there is no way to determine the difference between "fresh" and "storage" eggs when the quality is the same.

Labeling, marking, and advertising are some of the stronger points covered by the New Mexico law. No eggs can be offered for sale at retail unless they are correctly labeled concerning grade and size. The labels must be pasted to each case or partial case, and the name and address of the packer must be stamped on the label. The size of the eggs

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[2]Ibid.

must also be stamped on this label, but the color of the label will determine what quality the eggs may be. Colors used for the different grades are as follows: blue - AA; red - A; white - B; yellow - C; and green - unclassified.

Cartoned eggs must be labeled the same as case eggs. The attached label must seal the carton. Grades will be designated by the color of the label, the same as the case label colors. The name and address of the packer must be stamped on the egg carton. The size of the eggs will be stamped in the blank space on the carton label. Cold storage and processed eggs must be labeled as such on the carton.

Deception in the sale of eggs has been very limited since the egg grading law went into effect. When eggs are advertised for sale, the classification as to grade and size must be clearly stated.

> Terms such as, "fresh eggs," "strictly fresh eggs," "hennery eggs," "new-laid eggs" or descriptions of similar import shall not be used in connection with the sale or offering for sale or advertising for sale of eggs in New Mexico that do not meet the minimum requirements for the New Mexico Grade A eggs or better.[3]

When selling eggs by the case, the dealer must include an invoice to the buyer, stating the correct size and grade description. The invoice is to include both the name and address of the seller and must be kept on file by the receiving dealer for thirty days.

No uncartoned eggs can be sold at retail.

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[3] Ibid, p.3.

Standards for Eggs

"The New Mexico consumer grades for shell eggs shall be designated as AA - A - B - C - Unclassified."[4] Standards for these grades will be the same as those set up by the United States Department of Agriculture, with the exception of Unclassified eggs. Sizes shall also conform to the United States Department of Agriculture regulations.

If the grades or weights set forth in the United States standards change, this change will be made in the New Mexico Egg Law the following July 1, by the Board of Regents.

Exclusions and Exemptions

Exemptions were made in cases of:

> producers selling directly to consumers not to exceed 5 cases (30 dozen per case) in any one week, or dealers buying from producers not to exceed 10 cases (30 dozens per case) of eggs in any one week or 520 cases per year.[5]

These exclusions and exemptions leave an opening for many dealers on the east side of the state. Grocery stores are defined as dealers, and many of these stores purchase large quantities of eggs that are supposedly subject to inspection; however it is very difficult for the Inspection Department to determine whether the stores buy ten cases a week when there are no receipts made out to the farmer.

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[4] Ibid.

[5] Ibid.

Enforcement and Financing

An inspection department is set up under the Board of Regents of New Mexico College of Agriculture and Mechanic Arts for the purpose of enforcing the provisions of the law.

The financing of the department is done by selling the individual carton labels for one-third cent each and case labels for ten cents each. With approximately one million carton labels being used monthly,[6] this revenue alone would amount to $3300 monthly. Case labels, plus licenses of dealers, bring in additional income for financing the department.

Inspectors or agents may enter any place of business during regular hours to make inspections. When eggs offered for sale do not meet the standards of quality that the label carries, the inspector places stop sale notices on the lot. Any person violating the provisions of the law may be fined or imprisoned.

Benefits of the Law

The group that has benefited most from the law is the consumers of New Mexico. It is now possible for the consumer to go into any retail grocery and buy graded eggs.

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[6]Statement by Richard G. Marek, Chief Inspector, Egg Inspection Department, New Mexico College of Agriculture and Mechanic Arts, personal interview.

The large commercial producer who sells directly to a retailer has also benefited from this law. A large per cent of the eggs from these sources grade out as "AA" quality and demand a premium price. Few dealers who ship in eggs can buy and pack this grade; therefore, the local producer has the advantage of being the only one who is able to sell this quality product.

A few people have been caused extra expense by this law. These are the country grocery stores, most of which are located in the eastern part of the store and buy a fairly large volume of eggs from the farmer. They must install grading facilities and grade cartons and label all eggs that are sold at retail, if they handle more than ten cases a week. The cost of a license is also more expense to the small egg dealer.

Even though the rules and regulations set up by the United States Department of Agriculture are followed in New Mexico, the tolerances for grades are much less than the official United States standards. The tolerances for eggs, according to the United States Department of Agriculture, permit 15 per cent to fall into the next lower grade and 5 per cent to fall into the second lower grade. Altogether, this gives a 20 per cent tolerance. In New Mexico, the allowance is that 10 per cent can grade out the next lower grade.

CHAPTER VI

SUMMARY AND CONCLUSIONS

The primary purpose of this study was to analyze the production and marketing operations of poultry producers in New Mexico to determine whether the industry could be expanded profitably.

Poultry and egg production in New Mexico is not a large industry, but the possibilities for enlarging it look fairly favorable at present.

The cost of production in New Mexico is nearly the same as in nearby or surrounding states. Housing costs are equal to competing states, though the cost of land runs slightly more in New Mexico. Prices for baby chicks are slightly higher, but the average grade of hatchery in the state is better. Improvement in quality of chicks produced is growing rapidly.

New Mexico is a deficit area of poultry and egg production. It is also a deficit area for poultry feed production, and therefore, a large portion of the poultry feed is shipped in from other areas. Only in the eastern part of the state is the production of grain sufficient to supply the need. In most areas, feed grains must be transported in to fill the need. Poultrymen of New Mexico pay a slightly higher price for poultry rations than do the surrounding

states. except Arizona. Production of grains and high protein concentrates affects the prices, but New Mexico has other costs too, such as transportation and extra handling, that keep the prices higher than those paid in most other areas.

Price ratios for chicken-feed and egg-feed vary considerably, depending on production, consumption and feed prices. For profitable poultry meat production, a ratio between 7 and 8 must be maintained. New Mexico did not have a favorable chicken-feed price ratio in any of the four years covered by this study. Feed prices affected the ratio to quite an extent, but the lack of processing plants was one of the greatest factors. There are very few processing plants in the state, and producers are forced to sell at the price quoted. Competition is not keen enough in most areas to have much competitive bidding. Consequently, producers received lower prices than in areas of higher poultry production.

An egg-feed ratio of between 12 and 13 is considered profitable to egg producers. The ratio in New Mexico is more favorable for eggs than for poultry, although there was only one year in which the ratio was above 12. Prices received for eggs and prices paid for feed are the determining factors in the egg-feed price ratio. New Mexico maintained a ratio slightly above the national average. The one method of determining whether or not egg production is profitable is to consider the egg-feed ratio, with other factors being equal.

Producers in New Mexico have had an egg-feed ratio more favorable than any of the competing states, with the exception of Arizona.

Marketing at present is quite a problem in the eastern part of the state. The surplus area needs an outlet in some of the larger cities of the state, but egg dealers in these cities discriminate against eggs produced in New Mexico. The production is not constant enough throughout the year, and in the fall and winter months, producers on the east side of the state cannot supply enough eggs to meet the demand. More producers are now regulating their replacements to take care of these low production periods.

The New Mexico Egg Grading Law is aiding the producers of the state indirectly. In the past, low quality products were being shipped in and were sold as grade "A" eggs, but now all eggs are subject to inspection and penalties are assessed against violators of the law.

Cotton, permanent pasture, and alfalfa production make up a majority of the irrigated acreage in New Mexico.

> The average yield for cotton in 1950 in New Mexico was 526 pounds of lint per acre. The average price received was 43.41 cents per pound. In 1951 the yield was 414 pounds per acre, with the price averaging 43.10 cents per pound. The average gross income per acre these years would be about $203 per acre.[1]

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[1]Statement by Carl Hall, instructor in marketing, New Mexico College of Agriculture and Mechanic Arts, personal interview.

"Permanent pasture, which is used primarily for grazing dairy cattle, will carry about 3 cows per acre."[2]

Alfalfa for hay is grown in almost all irrigated areas. "Average production for the state is about 3 tons per acre. The price received over the past 5 years has been approximately $33 per acre."[3] The gross income for alfalfa would be about $100 per acre.

One acre of land will carry 1000 to 1500 laying hens with ample room to raise replacement stock, and producers in some of the deficit egg production areas have averaged a net profit of $3 per laying hen during 1950 and 1951. With conditions remaining as favorable as they are now, and consumption of eggs increasing each year, it looks as if the poultry industry could be increased considerably in some areas of New Mexico and still be a profitable enterprise.

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[2] Irrigated Pastures in New Mexico, Experiment Station Bulletin 362, (State College, N.M., July 1951), p. 23.

[3] Statement by Morris Evans, associate professor of agricultural economics, New Mexico College of Agriculture and Mechanic Arts, personal interview.

APPENDIX I

Survey Used to Determine Handling Costs of Egg Dealers

HANDLING COSTS OF EGG DEALERS IN NEW MEXICO

1. Do you ship in all your eggs? Yes_____ No_____.
   If not what per cent are shipped in_____?

2. How many cases do you average handling each week____?

3. What is your source of supply_____?

4. Do you buy current receipts_____?

5. What per cent of your eggs are graded when you purchase them_____?

6. What per cent of the current receipts you buy grade out
   A_____ B_____ C_____ quality?

7. What different grades of eggs do you sell_____?

8. Do you regrade your eggs before they are sold?
   Yes_____ No_____.

9. What does your transportation cost per dozen_____
   case_____?

10. What does regrading cost per dozen_____ case_____?

11. Do you pay your graders by the hour_____ case_____
    week_____?

12. How much do your cartons cost_____?

13. How much does your cartoning cost per case_____?

14. What is the cost per case for delivery_____?

15. Do you use a per cent markup? Yes_____ No_____.
    If not, how much do you try to average per case_____?

16. How much is your capital investment in equipment_____?

17. How much do you pay out weekly for salaries_____?

18. Do you handle any other products besides eggs_____?

19. Does the local producer affect your market? Yes_____
    No_____.

20. What season of the year is your best business season _____?

21. Has the New Mexico Egg Grading Act helped your market _____?

22. How much do you average spending each month for egg stamps_____?

23. Do you have your own cooling system within your plant? Yes_____ No_____.

24. Do you handle any cold storage eggs, if so, how many cases a week_____?

25. Do you process or handle any processed eggs, if so, how many cases a week_____?

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