THE WOOL ACT OF 1954 IN ITS HISTORIC SETTING

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CHAPTER I

INTRODUCTION

The National Wool Act was passed by the House of Representatives on 17 August, and by the Senate, on 18 August 1954. The Act became operative at the beginning of the 1955 marketing year.

An annual domestic production of 360 million grease pounds--roughly an additional 50 percent of, or about one hundred million pounds above, current annual production--is established, by the Act, as its goal.

The Secretary of Agriculture is authorized to support shorn wool prices at whatever level--up to 110 percent of parity--he believes necessary to encourage production to reach 360 million pounds. The difference between the prices received by growers on the open market and the support levels annually established by the Secretary of Agriculture, is paid, by the government, directly to wool growers.

Why did Congress decide to grant high rigid price supports to wool when, for all other agricultural products, flexible and lower level supports seem to be more in fashion? And, why, once it was decided to support wool, did the Wool Act adopt direct payments to growers as a method of implementation?

The answer to these questions is to be found in an analysis of the forces which currently determine the supply of, and the demand for, domestic wool. Accordingly, chapter II of the present thesis is devoted to an analysis of the factors which determine American wool production, and chapter III, to those which determine domestic consumption. The interpretation by Congressmen and Senators of these economic forces also influences the choice of measures adopted.

The Wool Act is the direct descendant of a long line of governmental measures pertaining to wool. It is, as it were, a summary of their failures and achievements, and an attempt at new solutions. The second part of the present thesis traces the historical antecedents of the Act and ends with a detailed discussion of the Act itself.

Since economic forces have historical origins and since some parts of history deal with economic questions, there will, unfortunately, be some overlapping between the "economic" and "historical" sections. It is hoped that these contradictions and complexities will be satisfactorily resolved in the concluding chapter which will bring together, briefly, all the forces which have combined and conspired to make the National Wool Act of 1954.

The discussion will be limited largely to the question of shorn wool for the following reasons.

The coarsest wools are used in making carpets; finer, apparel wools for the purpose that their name implies, and in

the making of blankets. Carpet wools are not grown in the United States and are imported duty free.

The National Wool Act, in addition to providing price supports for shorn wool, provides supports for mohair and for pulled wool. Support prices for mohair and pulled wool are to be established at levels which will maintain "normal marketing practices." No attempt at increasing their production is contemplated in the Act.

Mohair, the hair of Angora goats, is blended with sheep's wool in the manufacture of fabrics, whenever its luster, superior reaction to dyes, strength, and other qualities, are especially desired. Angora goats are raised, together with sheep, in Texas, Missouri, Oregon, New Mexico, Arizona and California. In total pounds clipped, annual mohair production is about two thousands of shorn wool production.

Pulled wool is wool pulled from the pelts of slaughtered animals. It is inferior in quality and more brittle than shorn wool. The supply of pulled wool obviously depends on the amount of domestic lamb and mutton consumed. Pulled wool is a by-product of the slaughtering and meat-packing plants in Chicago, New York, and other centers. Packing houses generally sell their wool, under their own names, or through subsidiaries which handle wool, directly to wool mills specializing in pulled wools. Pulled wools are neither processed in the same manner, nor marketed through the same channels, as shorn wools. About 84 percent of domestic wool production is shorn wool; 16 percent is pulled wool.

Carpet wool, pulled wool and mohair have been omitted in this presentation. One or another is mentioned, from time to time, only when it is such an intimate part of shorn wool policy, or included in available statistics or other material in such a manner, that not mentioning it would give a biased picture.

CHAPTER II

FACTORS WHICH DETERMINE SUPPLY

Sheep Raising and Its Requirements

Wool growing is economic only where land--large tracts of cheap land--is available in abundant supply. Where land is not abundant, sheep are raised primarily for mutton, or are replaced by more intensive enterprises, capable of profitably absorbing high land costs.

In the United States, the historic progression from a pastoral to an industrial society is reflected in the rise and decline of the sheep industry. As long as the United States was only partly settled, sheep moved westward with each new frontier and sheep numbers increased steadily with the developing economy. Since the turn of the century, with the closing of the last frontier, the long term trend in sheep numbers has been downward except during the 1930's when a sharp increase in sheep numbers occurred. Since the 1930's, numbers have again declined. The western ranges are said to have reached their capacity around 1902.[1] The census of 1900 reported 61 million sheep and lambs, the highest number recorded; that of 1950 reported 31 million.[2] The decline in

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[1]Haldor R. Mohat, The Tariff on Wool, p. 14.

[2]Appendix Table 1.

sheep numbers per capita has been steadier and more pronounced than that in total sheep numbers. It provides a more accurate measure of the declining importance of sheep. (See Figure 1.)

Sheep are raised for meat and for wool. But the best meat and the finest wool have so far been found to be genetically antagonistic traits, that is, no one sheep, or breed of sheep, produces fine wool and, also, good meat.[3] Due to the inbreeding, crossing and recrossing of different strains, there has come to be a wide range in the quality of the mutton produced by different sheep and an even greater variety in the qualities of different wools. Continuous, and sometimes haphazard crossing, has led to considerable variation within breeds as well as among the different breeds. Within this multiplicity of types and traits, the merino, which can be traced back to the Spain of Roman times is the wool sheep par excellence and the poorest mutton producer. It stands at one pole. The English "mutton" breeds--the Cotswald, the Shropshire, the Lincoln, etc.--stand at the other. Intermediate between the two basic types, the so-called crossbred breeds, first developed in the nineteenth century, are attempts at finding the perfect dual-purpose sheep. Perhaps the Corriedale, developed in New Zealand, comes closest to achieving this goal. Crossbred sheep were developed to--and, in fact, do--produce a meat superior to that of the pure mutton

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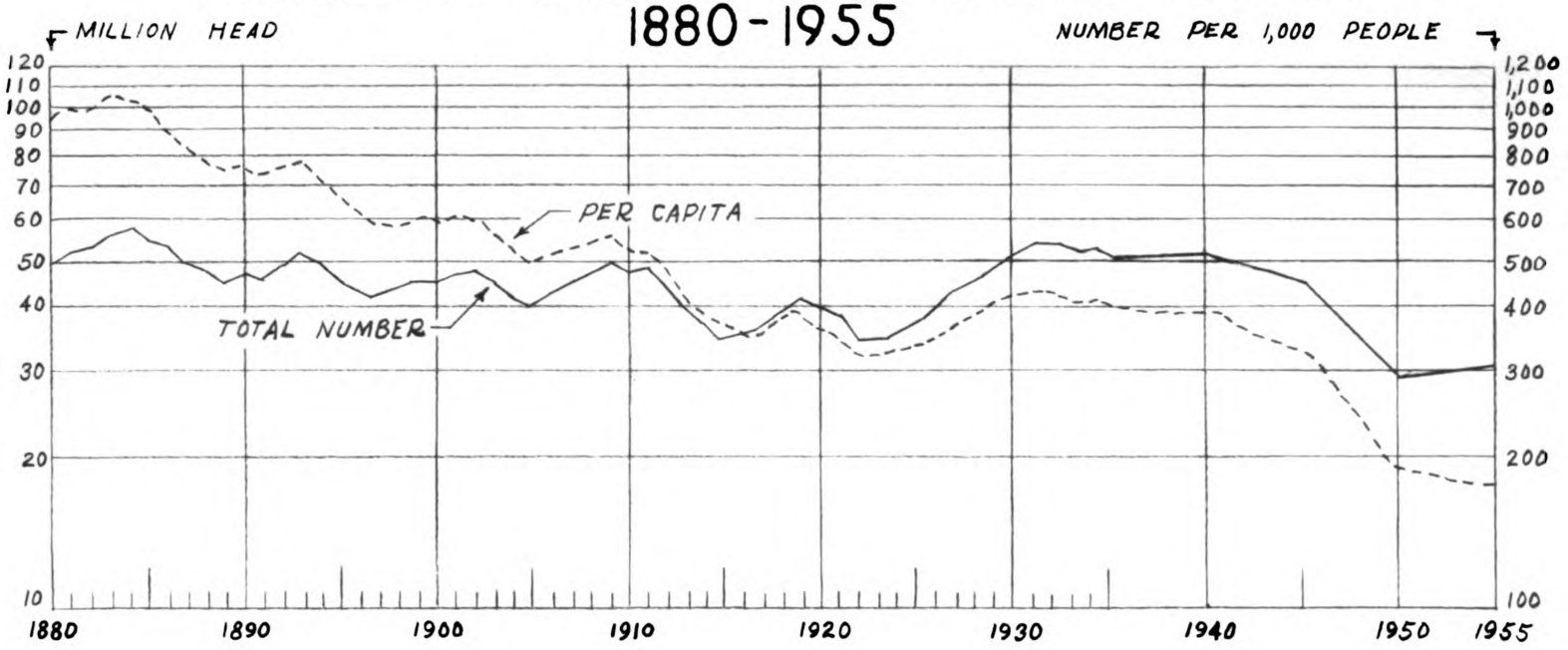
[3]H. C. McPhee and D. A. Spencer, "Breeding Problems with Sheep," Yearbook of Agriculture: 1936, p. 913.

FIGURE 1

NUMBER OF SHEEP IN THE UNITED STATES 1880-1955



Source: C. K. Alexander, The Tariffs on Pork and Mutton, p. 61, for the years 1880 - 1934. Data for later years calculated by the author.

breeds.[4] Their wool is much finer than that of the mutton breeds, but no crossbred type yet equals the merino in fineness, uniformity, and quality of wool.

> Sheep may be grouped into eight main types according to the nature of the return secured by the breeder . . . in the merino zone occur sheep, chiefly wether, which are kept as wool producers only (type 1), and breeding sheep which return profit by the sale of their castrated male offspring as potential wool producers (type 2). These are succeeded largely within the "come back" and quarterbred zone by animals which are bred for the purpose of producing wethers' offspring as potential wool and mutton producers (type 3) and which have a greater rate of increase (or higher fertility . . .) and so supply surplus stock, of both sexes, for breeding and for wool and mutton production (type 4). In all these the production of wool is the main issue and the stock is predominantly of merino kind, but successive crossing with Long Wool and then Down Stock (mutton breeds), leads gradually to the higher developed mutton forms, such as wool-producing "half-bred" ewes, whose offspring are largely used as a basis for mutton production (type 5); wool-producing ewes whose wether lambs are sold for early mutton and fat lamb, and whose ewe lambs are kept to breed fat lamb (type 6); and cross-bred ewes themselves finished for mutton after their useful life as the mothers of early-maturing lambs is ended (type 7). . . . pure-bred mutton ewes producing cross-bred lambs (are the eighth type).[5]

There are three stages in the evolution of a sheep industry. First, in regions of abundant land, with a low population density, merino sheep are raised only for wool. Since the return per merino is less than the return per sheep raised for mutton and wool, flocks of merino sheep tend to be larger than those of crossbred sheep; their land requirements,

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[4]Donald M. Blinken, Wool Tariffs and American Policy, p. 15.

[5]J. E. Nichols, A Study of Empire Wool Production, in Erich W. Zimmermann, World Resources and Industries, p. 352.

greater. Wool is a complex and exacting raw material, requiring specialized labor. For this reason, also, wool growing tends to be most profitable in large enterprises in regions specializing in wool. Finally, raw wool is a commodity of comparatively high value, relative to its bulk and weight and can be shipped long distances, at relatively small cost, with little deterioration in quality. It is thus admirably suited to production regions far from processing and consumption centers.

Second, as population increases or population centers move closer to sheep areas, the sheep industry gradually turns away from wool, to meat, and the wool clip becomes a by-product, meat being the main source of income. Flocks become smaller, often only one part of a multiple enterprise. The wool is frequently of inferior quality and carelessly handled. 1910 is sometimes chosen as the point at which meat began to be more important than wool in the United States.[6]

Finally, step three, as population becomes still more dense, sheep are pushed out altogether and are replaced by more intensive forms of agriculture and by industries and towns. In this last stage, sheep do not survive partly because sheep raising does not lend itself to mechanization. Labor costs, taking their cue from the industrial sector

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[6]C. K. Alexander, The Tariffs on Pork and Mutton, p. 62.

of the economy, become exorbitant, putting sheep at a comparative disadvantage.[7]

The Production and Marketing of Wool

Since the United States today is a highly industrialized society, it is not surprising that sheep make a very small contribution to total national wealth. Even the agricultural segment of the American economy assigns a minor role to sheep. In 1950, 16.6 percent of the total population were farmers.[8] In that year, 6 percent of all farms reported sheep, compared to 56 percent reporting hogs and pigs, and 75 percent reporting cattle.[9]

Most sheep farmers are small producers. Their income is derived principally from non-sheep enterprises and most of their sheep income is derived from meat, rather than wool. Sixty percent or the farms reporting sheep shorn had less than 25 head shorn per farm and 96 percent had less than 300 shorn. Only 1.4 percent had a thousand or more head shorn per farm.[10]

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[7]In certain industrialized areas, a trend counter to the stage three just described may develop. A shift away from the most intensive to less intensive forms of agricultural exploitation may occur. The part-time farmer who earns a substantial part of his income in town will prefer a type of farm enterprise requiring a minimum outlay of capital and labor. Thus, assuming fenced pastures, existing buildings, etc., the part-time farmer will, for example, raise beef cattle in preference to dairy cows. Herein may lie a partial explanation of the slight increase in sheep numbers in the farm flock area during the past decade.

[8]Statistical Abstract of the United States: 1955, p. 13.

[9]"Livestock and Livestock Products," U. S. Census of Agriculture: 1950, II, 400, 422, and 427.

[10]Appendix Tables 2 and 3.

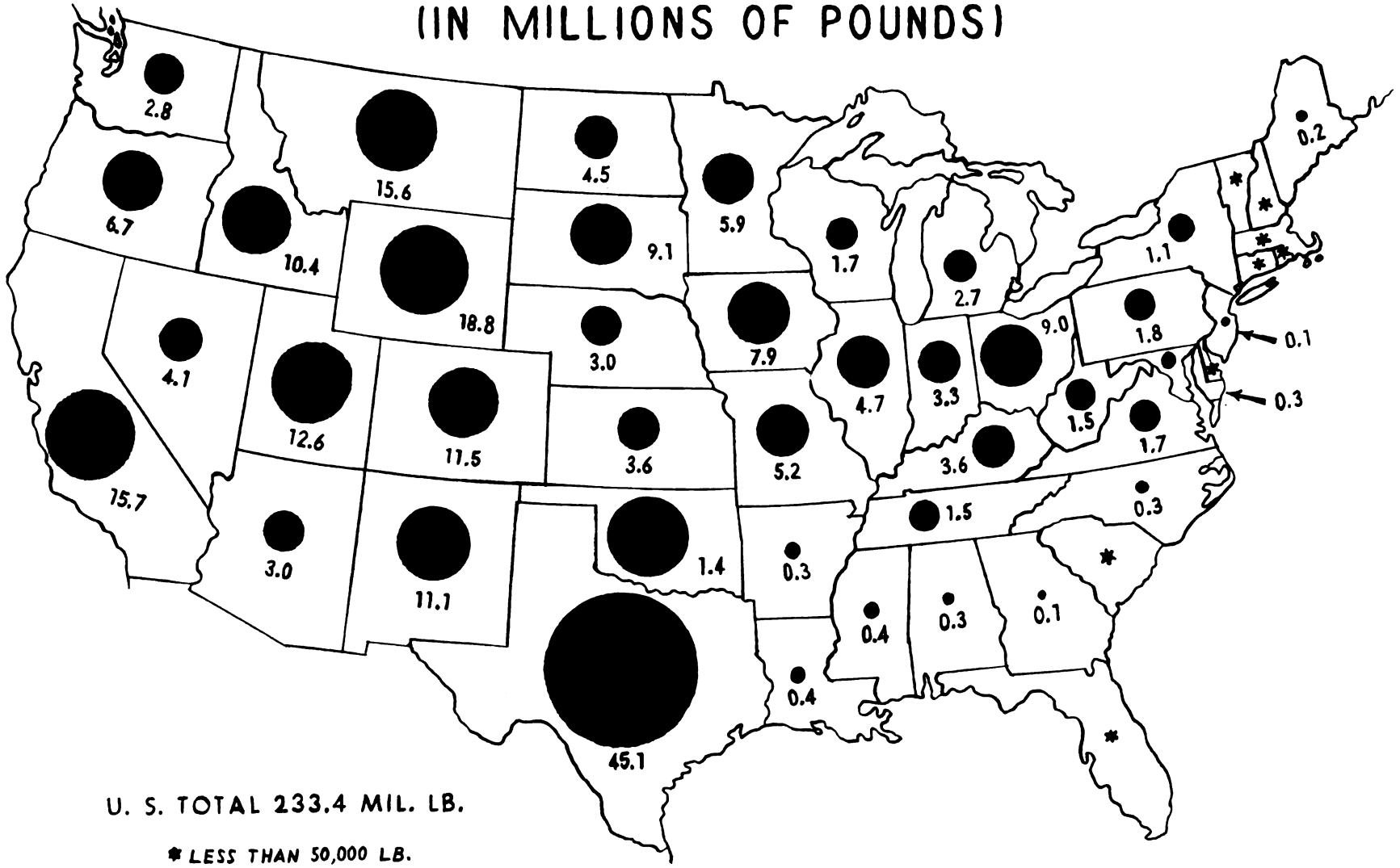
A very crude estimate of the annual income from shorn wool, of farmers having sheep, is given below. In 1950, the average farm price per grease pound of wool was 62 cents and the average wool yield per sheep was 8 pounds. In that year, the annual average income of farmers, from wool, would therefore be:

Number of Sheep Shorn per Farm	Annual Gross Wool Income (in dollars)	Percentage of Sheep Farmers Represented
up to 25	124 or less	60
25 to 49	124 - 243	21
50 to 299	248 - 1,483	15
300 to 999	1,488 - 4,955	2
1,000 to 2,499	4,960 - 12,395	1
2,500 and over	12,400 or more	.5

Sheep and wool are of varying regional importance, but every state raises at least some sheep (See Figure 2). American sheep raising comprises two, or three distinct "systems." The relative economic importance of sheep, the scale of operations and, in consequence, the size of flocks, the marketing structure, and the types and quality of wool produced differ in each of the systems.

Texas, sometimes grouped with the other important wool-producing states of the West, deserves separate mention. It produces more wool than any other state and, on the average,

FIGURE 2
SHORN WOOL PRODUCTION, 1955
(IN MILLIONS OF POUNDS)



Source: The Wool Situation, April 17, 1956, p. 12.

grows about 20 percent of the annual domestic clip. Almost all Texas wool is merino wool.

Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Washington, Oregon, Nevada, and California are considered the center of the wool-growing region and are collectively designated as the "Territory" or "Range" states. About 70 percent of the sheep raised in the United States are raised in the Territory states and Texas.

In other areas, sheep raising is a secondary industry. These smaller flocks are called "farm" or "native" flocks. Wools not grown in Texas or in the Territory states are called fleece wools.

The division of American wool-growing into the compartments, "Texas," "Territory," and "farm" or "native" is valid only within limits. If states are classified according to the size of their annual clips, a slightly different picture emerges. Some of the Territory states are omitted and a few Mid-Western states included, in such a list. In 1949, the following states produced 5 million or more pounds of wool:[11]

Texas	41	Colorado	10	Ohio	7
Wyoming ..	15	N. Mexico ...	9	S. Dakota	6
Montana ..	11	Utah	8	Missouri.	5
California	11	Idaho	8	Iowa ...	5

United States ... 179 million

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[11]"Livestock and Livestock Products," op. cit., p. 433.

The Western states, with Texas in the lead, most closely resemble the merino zone, previously described, and produce most of the "fine" or merino wool. Dual-purpose sheep are raised in the rest of the country. But the dividing lines are not clearly drawn. A considerable amount of crossbred wool is grown in the territory states and fine wools, in small amounts, are grown outside the West. Moreover, wool's comparative disadvantage is beginning to make itself felt, even in the West. Beef cattle, requiring less labor than sheep, are increasingly pushing sheep off the Western ranges. Together with a certain regional concentration, history has left behind wool-growing pockets of various sizes, widely scattered across the country.

Roughly half of the domestic clip is fine wool. Half, also, of the clip is produced by the 1.4 percent of all growers who own flocks of a thousand or more head. It seems reasonable to suppose that these two halves are approximately one and the same.

United States sheepmen derive about 60 percent of their gross income from the sale of lambs for slaughter.[12] From the above discussion it is obvious that the national average is deceptive since it groups merino and mutton enterprises under a single heading. The majority of growers derive much more than 60 percent of their income from meat whereas growers of merino flocks derive much less.

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[12]Blinken, op. cit., p. 13.

Sheep are generally shorn once a year. In parts of Texas and a few other areas in the Southwest, sheep are shorn both in the spring and in the fall, producing a shorter staple. The shearing season begins sometime in February in the Southwest and, during March, April, May, June and July, moves east and north, depending on the climate, the weather, and local custom.

Large ranches, especially in the West, have their own shearing sheds. Smaller flocks are driven to a contractor's, or other central shed where the sheep are shorn at so much per head.

Most of the shearing is done by crews of professional shearers who travel from ranch to ranch or shearing shed. Machine shears are used in the West and on the larger farms. On smaller farms, especially in the East, hand shearing is not uncommon. When hand shears are used, the clip is more uneven, and shorter, than with machine shearing.

The central pivot in raw wool marketing is the "wool trade," wool dealer houses who buy wool from growers and resell it to the wool mills. The majority of wool mills are located in the New England and Middle Atlantic states and most of the wool dealer houses are in Boston.

In the West, dealer representatives follow the shearers, inspecting much of the wool as it is shorn, or soon after it has been shorn. The wool is bought or consigned to the dealer, and shipped, ungraded, to Boston. The majority of Texas wools

are sold through the more than one hundred warehouses in Texas, to dealer representatives. Most warehousemen act as agents for the growers, but a number of warehouse operators represent Boston wool houses. The bulk of the smaller clips in the fleece wool states are first sold at the farm to local buyers--country dealers who live in nearby towns and buy wool as only one of their business activities, or the local agents of such dealers. The country dealers may accumulate wool on their own account, speculatively. More often, they buy on commission against orders from central market dealers.

Growers generally sell their wool as it comes from the sheep's back. Raw wool is graded and prepared for consumption channels by the wool dealer. The wool is inspected, before being bought, because of the multitude of factors which determine the value of a lot of wool and because these factors have so far eluded rigid standardization. Prices received by growers are decided by private agreement between buyer and seller and not, as is often the case in other markets, by an agreement to pay a few cents more or less than some published price. No day-to-day farm price quotations are available in the case of wool.

Raw or "grease" wool is sold on its "clean value," that is, the market value of the wool after all foreign matter has been removed. Wool contains a natural grease or yolk. It may contain sand, dust and dirt and such vegetable matter as seeds and burrs. Impurities are removed, at the mill, by

scouring. Excess seeds and burrs are removed by carbonizing the wool after it has been scoured. The clean yield or "shrink" of grease wool varies from about 25 to 80 percent of its grease weight.[13] In general, Texas and territory wools shrink more than fleece wools, and the finest wools, containing more natural grease than the medium or coarser wools, tend to have the heaviest shrink.

Leaving aside questions of differences in quality, and transportation costs or other charges, the buyer estimates the shrink of any lot of wool he inspects and offers the grower the difference between the clean price of the wool and his estimate of its shrink. If, for example, the clean value of a lot of wool is estimated at $1.00 a pound and the expected loss in weight after scouring is 60 percent, the grower will be offered 40 cents a pound.

The importance of a correct estimate of shrinkage, to growers, cannot be overemphasized. A study made in 1945 showed that, on the basis of the then-prevailing prices, the grease value of fine territory wool decreased more than a cent a pound for each 1 percent increase in shrinkage.[14]

The second most important factor in price determination is the type and intrinsic quality of the wool. Combinations of

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[13]Werner Von Bergen and Herbert R. Mauersberger, American Wool Handbook, p. 317.

[14]Investigation of the Production, Transportation and Marketing of Wool, p. 10.

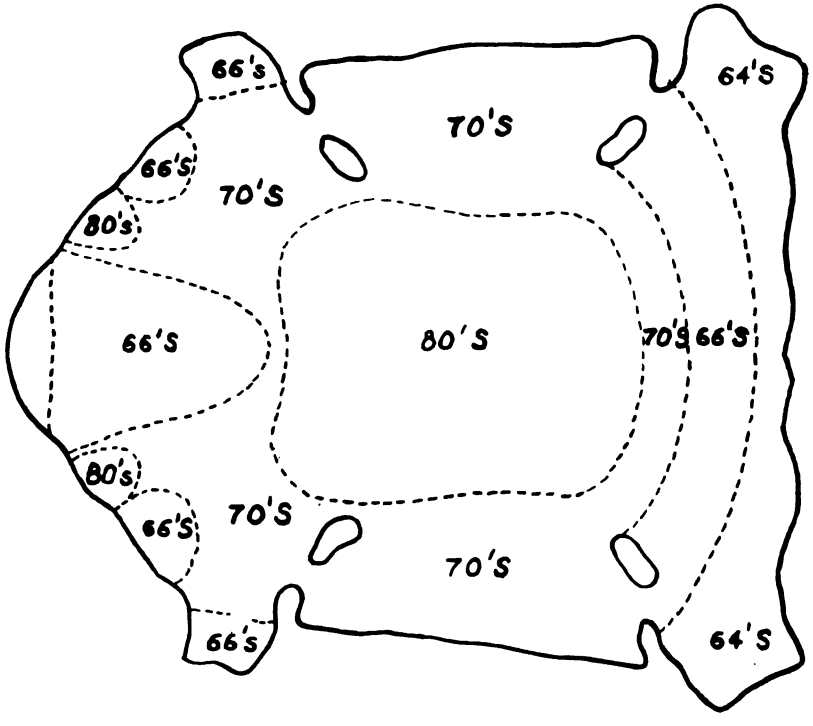
a variety of characteristics determine the character of the yarn or cloth which will be made from a particular wool and, in consequence, the value of different wools. The cloth will be fine or heavy according to the diameter of the wool fiber. The relative fineness of the fiber determines the "grade" of wool. Wools are graded, in the United States, either according to the American blood system or according to the more minute count system, used internationally.

The blood system originally designated the proportion of merino blood in the sheep. Merino wool was known as fine wool. Coarser wools were ranked successively downward, as half-blood, three-eighths blood, etc. Today, the blood system, like the count system, refers only to the diameter of the fiber. In the count system, wool grades run from "90's," for the finest wools to "36's," for the coarsest. Merino wools are wools, 64 and finer, and apparel wools, the subject of the present paper, are wools finer than 44's. The approximate relationship between the count and blood grades is given in Appendix Table 4.

Each fleece contains several grades of wool, according to a definite pattern. The shoulder of the sheep carries the finest wool, the britch, the coarsest. As an illustration, the grades in a merino fleece are shown in Figure 3. A cross-bred fleece includes more grades than does a merino fleece.

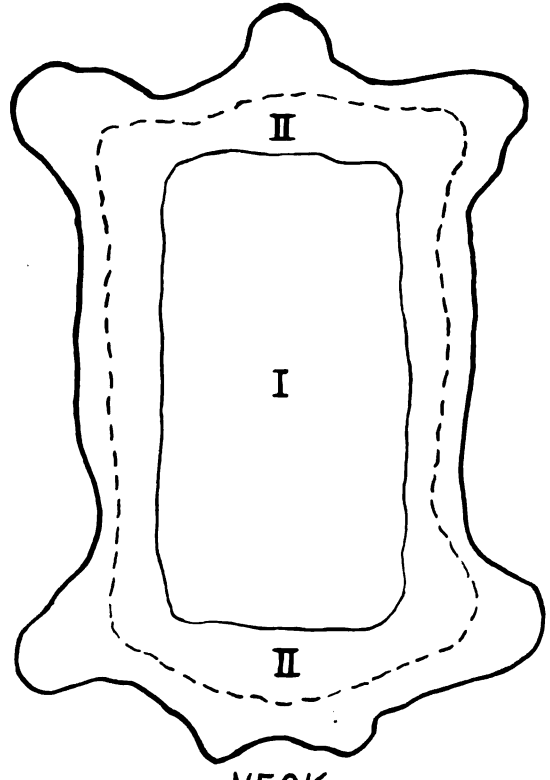
The length of the wool staple determines whether the wool cloth will be "worsted" or "woolen." The longer more

FIGURE 3



Distribution of quality in a merino fleece.

Source: H. Munz, The Australian Wool Industry, p. 98.



Skirting the fleece

Skirting is the removal of inferior or objectionable sorts. When a fleece is deeply skirted (I), practically all of the inferior wool is removed. A light skirting (II) may leave a certain amount, while an unskirted fleece contains all of it.

Source: D. W. Carr and L. D. Howell, Economics of Preparing Wool for Market and Manufacture, p. 26.

uniform staples or "combing" wools--usually 60's and higher--are used in the manufacture of worsteds; the shorter "clothing" or "carding" wools are used in the manufacture of woolens. In worsted manufacture, the wool is "combed" to separate the shorter from the longer fibers. The long fibers are laid parallel to one another, then tightly twisted to form a hard and lustrous strand. Worsted cloth has a smooth, hard finish. The close weave of the cloth construction is plainly visible in the finished fabric.

Woolen yarn consists of fibers of varying lengths which are intermingled and crisscrossed. The yarn is fuzzy and loosely twisted. In wool fabrics, the yarns are merged into a solid form, concealing the original weave. Of the two systems of manufacture, the worsted system is by far the more important.

Although the coarser wools are, in general, longer than the fine wools, wools of the same grade vary in length. The finest and longest wools usually fetch the highest price.

Many other characteristics determine the quality and price of wool. The strength of the wool fiber, as well as its length, determines whether or not it can be used in worsted manufacture. The elasticity, the color--which determines how the wool will take the dye--, the crimp (or curl), the luster, softness and uniformity of different wools determine their relative values.

Soil, climate and feed as well as the breed of the sheep and the husbandry, influence the character of wool. This composite of characteristics--as well as the lack of standards--associated with different wools has led the wool trade to identify wools with the regions in which they are grown. The names "territory" and "fleece" of course imply different types of wool, and wools are further identified, sometimes by the name of the state and sometimes by the region in the state in which a wool is grown.

Wool, by nature, is difficult to classify. In addition, existing standards are not rigid. They are merely "rough divisions, little more than rallying points in an infinite array of classes and subclasses, types and subtypes."[15]

As previously mentioned, the farm price of wool is the Boston clean price for each quality and grade, less estimated shrink. Transportation, buyers' commissions and other marketing charges, are of course also deducted. In addition, prices received by growers depend on the relative bargaining strength of buyers and sellers.

In the period 1933 to 1935, 75 dealers handled 90.2 percent of the domestic clip, the five largest dealers handling 33.6 percent and 25 dealers handling 72.9 percent.[16] At that

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[15]Zimmermann, World Resources and Industries, p. 348.

[16]Investigation of the Production, Transportation and Marketing of Wool, p. 10.

time, there were approximately 653 thousand wool farms.[17] The number of dealer firms has declined since 1935, but no current information on volumes handled by dealers is available.

> There is a basis for believing that firms engaged in assembling and processing wool may be able to take advantage of some elements of imperfect competition. They are more experienced than growers in judging shrinkage, grade, and bargaining resistance. They are more closely in touch with the market and the price situation and they may be backed by a principal large enough to influence the market price for wool . . . .
>
> A dealer on the Boston market has other advantages stemming from his strategic position that a grower who sells from the ranch does not have. The former has an established reputation on which the manufacturer he serves can depend. He is likely to handle particular types of wool, prepared in a way satisfactory to particular manufacturers. In other words, he sells differentiated products and preparation services to which manufacturers have become attached. Manufacturers are willing to pay for such products and services.
>
> But a grower can offer little in the way of differentiation of either product or services. His reputation cannot be significant when his clip is only a small part of the total purchases of most buyers. . . . Prices for wool are established in Boston, New York, and other central world markets. From the viewpoint of an individual grower, such price-making conditions approach pure competition. He has little or no opportunity under such conditions to affect his returns (1) by varying the quantity or quality that he, as an individual, places on the market, (2) by differentiating his product by brands, superior preparation, or packaging, or (3) by influencing the volume of his sales by advertising, or special services to buyers.[18]

It is evident from the foregoing that the wool marketing structure leaves much to be desired. It is unwieldy. Moreover, the fact that dealers rather than growers sell a

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[17] "Livestock and Livestock Products," U. S. Census of Agriculture: 1954, II, 434.

[18] D. W. Carr and L. D. Howell, Economics of Preparing Wool for Market and Manufacture, pp. 80-81.

"differentiated" product, and reap the benefits therefrom, has tended to discourage growers from improving the quality of their wool. For this, and other reasons, domestic wools are generally considered inferior to foreign wools. This question will be dealt with in greater detail in Chapter III which contains a section in which foreign and domestic wools are compared.

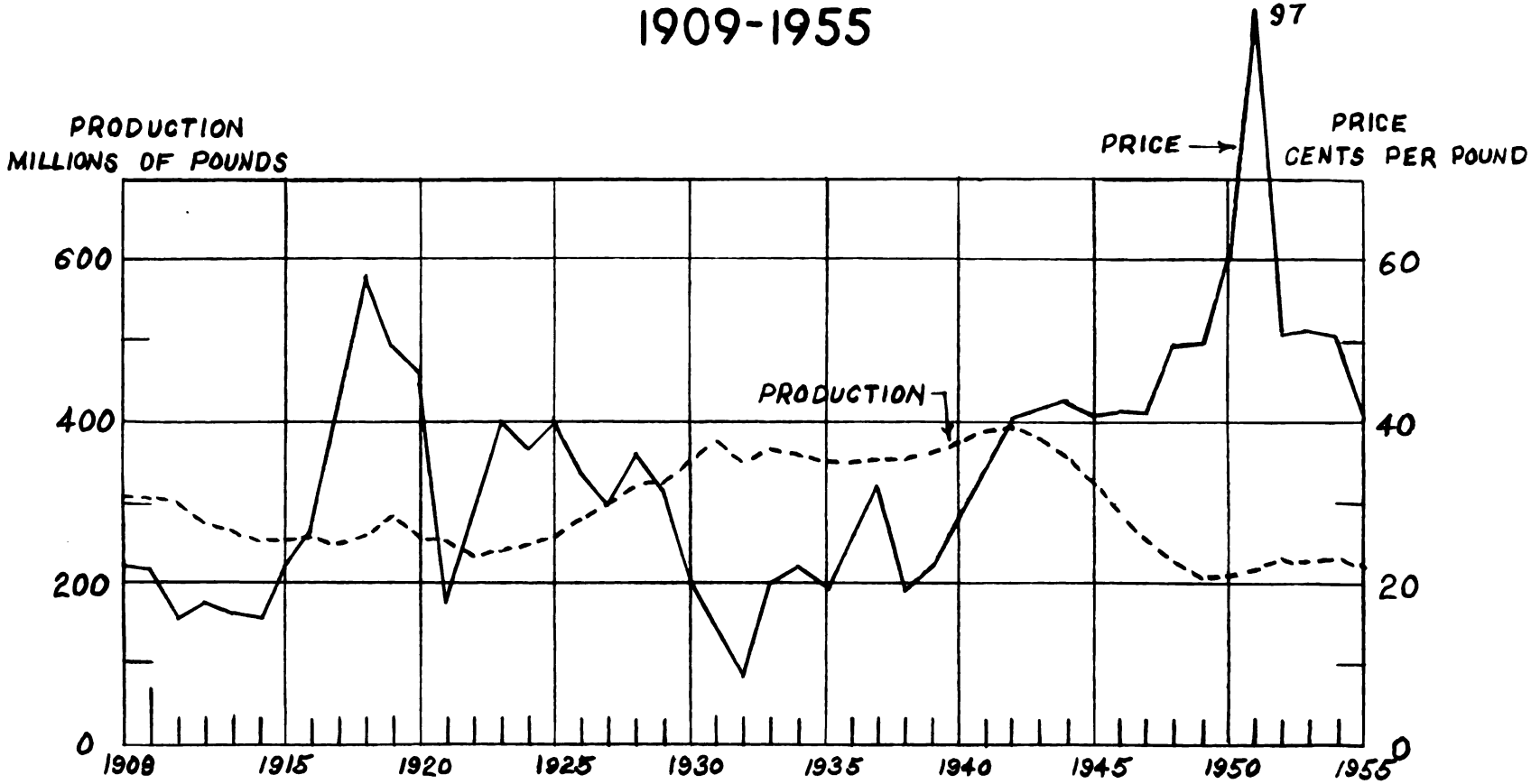
The Relation Between the Price and the Production of Wool

In 1949, the average price per pound of wool, received by growers, was 49.4 cents; wool production was 213 million pounds. In 1932, the price received averaged 8.6 cents and 351 million pounds of wool were grown. Many other instances of this inverse relationship are found in an examination of price and production data. (See Figure 4, and Appendix Table 5.) In general, periods of high prices have been associated with a decrease in production; those of low prices, with an increase in production.

Periods of high wool prices coincide with periods when all prices are high, and vice versa. Labor, plentiful during low-price periods, becomes scarce and expensive during high-price periods. Enterprises other than sheep reduce their labor costs by increasing the output per man through increased mechanization. But, as previously pointed out, wool growing does not lend itself to mechanization. Since the 1930's,

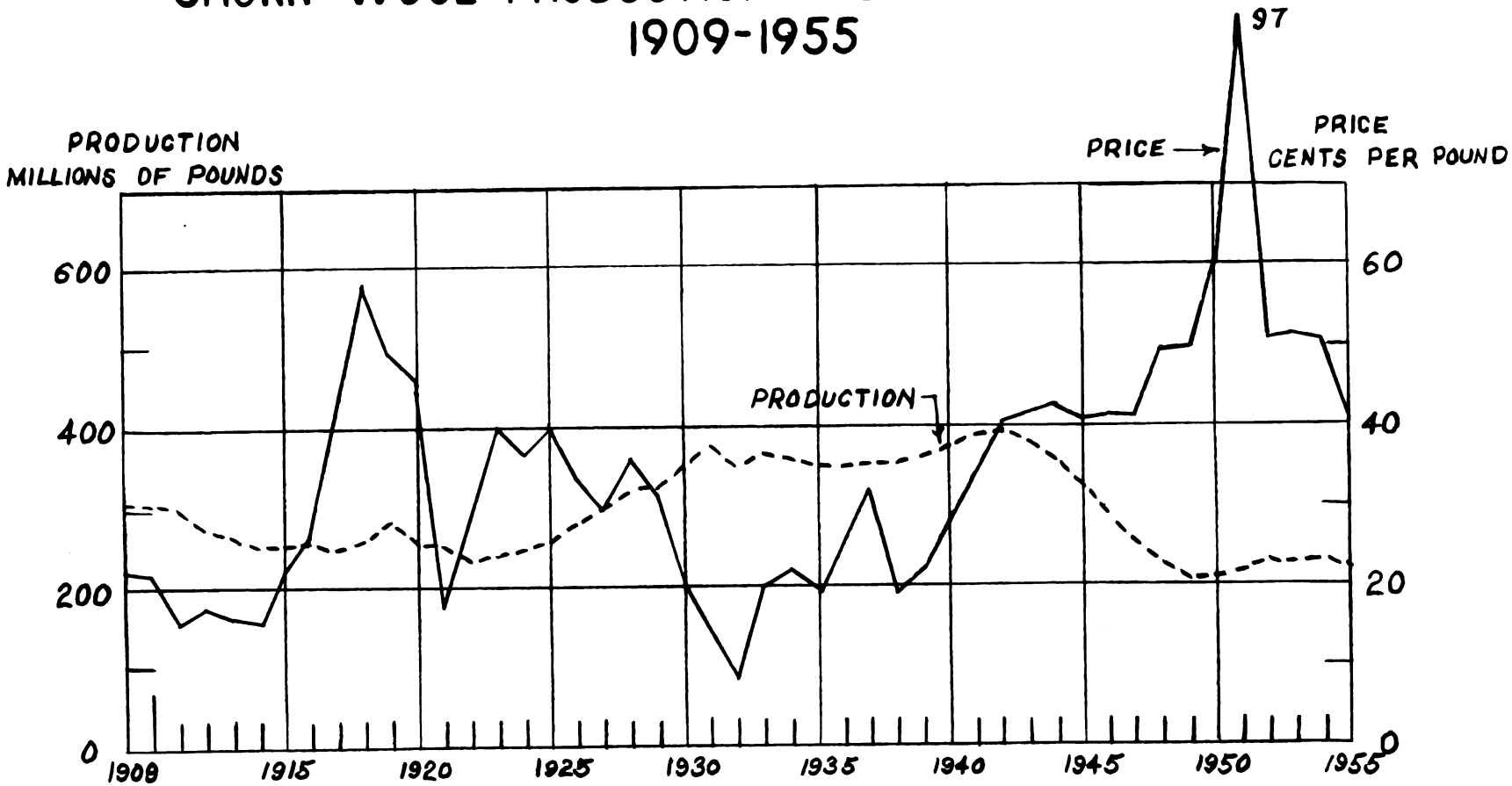
FIGURE 4

SHORN WOOL PRODUCTION AND FARM WOOL PRICES 1909-1955



Source: Investigation of the Production, Transportation and Marketing of Wool, p. 1407, and Appendix Table 5.

FIGURE 4
SHORN WOOL PRODUCTION AND FARM WOOL PRICES
1909-1955



Source: Investigation of the Production, Transportation and Marketing of Wool, p. 1407, and Appendix Table 5.

output per man hour in sheep and wool has remained relatively constant whereas that in agriculture as a whole has risen steeply. (See Figure 5.)

In a prosperous period, labor costs rise more rapidly than wool prices, and thus cause a decline in wool production, as growers turn to other, more profitable undertakings. A survey reporting reasons given by growers for reducing sheep numbers in the period 1943 to 1948 supports this contention. The survey covers the 29 most important wool-growing states. In Texas and the territory states, labor difficulties were cited as the most important reason. "The scarcity of all hired help and high wages" and "available help not qualified or dependable" together accounted for 14.5 percent of the answers in Texas, 29.7 percent in the territory states, and 17.5 percent in all 29 states. In the non-western states, low returns from sheep compared to alternative enterprises were listed as the decisive factor. In Ohio, Indiana, Illinois, Michigan and Wisconsin, for example, 37.2 percent of the growers stated this was their reason while 25.1 percent of the growers in all 29 states, so stated.[19]

It follows axiomatically--if the present reasoning is correct--that during a period of depressed prices, cheap labor might tend to provoke an increase in wool production.

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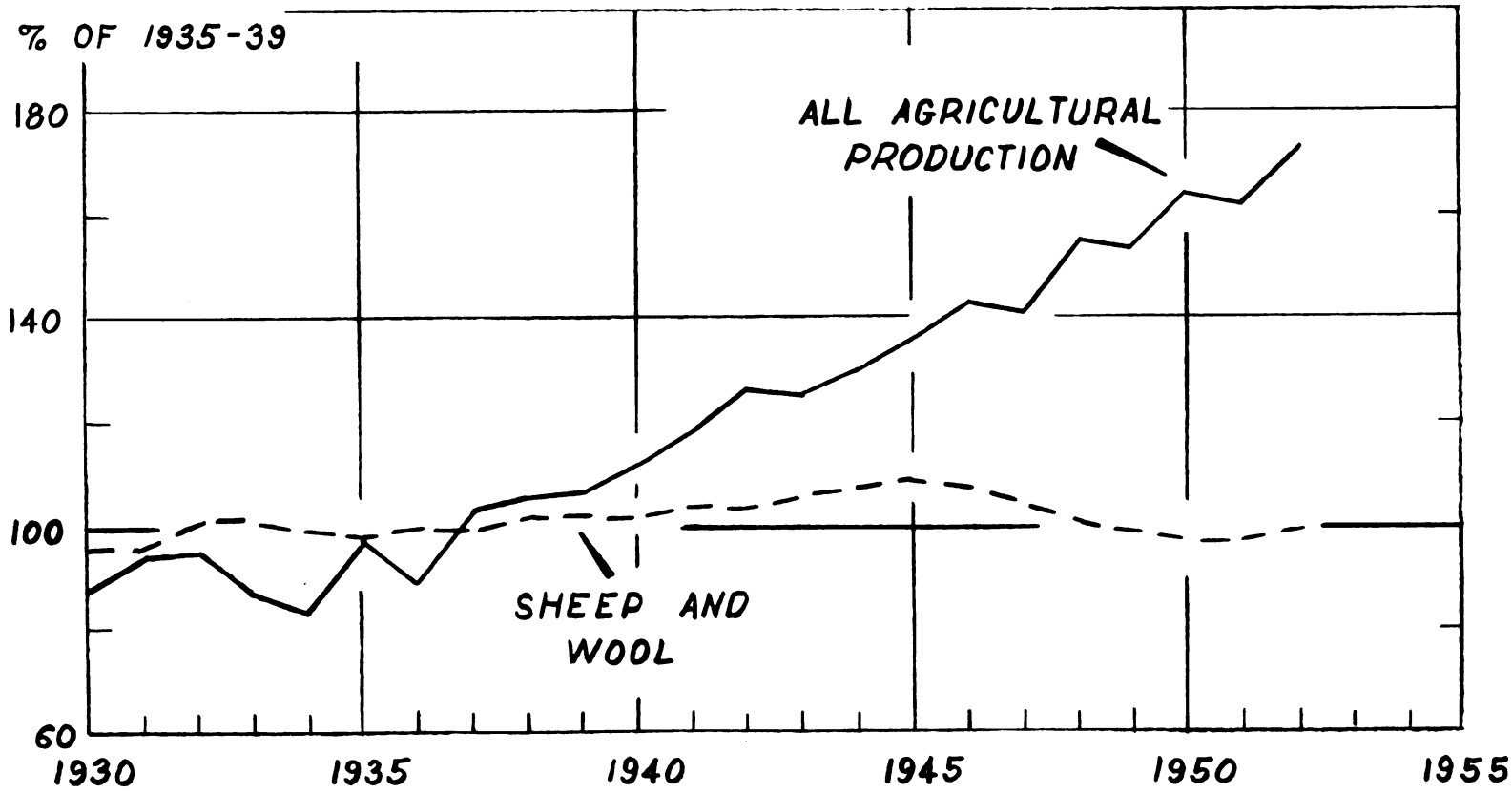
[19]Appendix Table 6.

FIGURE 5

OUTPUT PER MAN-HOUR IN SHEEP AND WOOL PRODUCTION COMPARED WITH AGRICULTURE AS A WHOLE



Source: Achieving a Sound Domestic Wool Industry, p. 11.

It was previously mentioned that cheap land, as well as cheap labor, is a requisite for a successful sheep industry. Perhaps land should be considered secondary in importance to labor, since short term fluctuations in a relatively mature economy, are at present under discussion. Nevertheless, it is probable that low land values, together with low wages, played a role in the increased number of sheep during the 1930's, and high land costs are a factor in the decrease in sheep numbers during and since the Second World War.

The Wool Act of 1954 hopes to increase wool production by means of price incentives. Under its terms, prices are to be supported up to 110 percent of parity. Since, unfortunately, annual average prices received by growers as a percent of the parity price are not available and since the average monthly receipts of domestic wool at Boston show July as the month of heaviest receipts, the July price--instead of an annual price--will be used. In the eleven-year period from 1940 to 1951, average prices received exceeded or equaled 110 percent of parity except in 1947 (99 percent), and in 1949 (109 percent). Wool production was large in 1940, but it had declined to only 228 million pounds by 1951.[20] The incentives provided in the Wool Act of 1954, when compared to prices received during recent years, would thus appear to be insufficient compensation for existing land and labor costs. The Wool Act will probably be ineffective in promoting an increase in wool production.

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[20]Appendix Table 5.

If, and only if, the economy as a whole became very depressed, and labor and land values declined sufficiently, if other agricultural prices continued to decrease and rigid price supports were not extended to other farm products, then wool and sheep might once more regain a certain ascendancy. If such a period should lie ahead, economic conditions might assist in making the Wool Act of 1954 "effective" in encouraging an increase in wool production.

CHAPTER III

FACTORS WHICH DETERMINE DEMAND

The Relationship Between the Price and the Consumption of Wool

Domestic consumption of wool increases during periods of high wool prices and decreases during low-price periods. In 1932 when the price per scoured pound of territory wool, 64's and finer, averaged 47 cents, national consumption was 188 million scoured pounds. In 1945, when the price of the same wool had risen to 118 cents, 589 million pounds of wool were consumed.[1]

Periods of high wool prices of course coincide with periods when personal incomes are high, and fluctuations in amounts of wool consumed can be attributed to fluctuations in personal incomes. Wool is principally used in the manufacture of clothing. Although a certain amount of clothing is a necessity, expenditures for clothing can be more sharply curtailed, for a period, than can expenditures for other necessities. Expenditures for clothing tend to increase more rapidly, with increasing incomes, and to decrease more sharply, with falling incomes, than do expenditures for other basic necessities such as food and housing. Since wool is one of

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[1] Appendix Table 5.

the most expensive textile fibers, it is undoubtedly even more sensitive than clothing as a whole, to changes in income levels. In 1932, income per capita was $381 and per capita consumption averaged 1.5 scoured pounds of wool. In 1945, per capita income was $1,076 and per capita consumption of wool was 4.2 pounds.[2] The high per capita consumption of wool in 1945 can, in part, be attributed to military demand. Of the 4.2 pounds consumed, an estimated 2.1 pounds were consumed by the military.

It was previously established that domestic production increases during low-price periods and decreases during high-price periods. Domestic consumption decreases during low-price periods and increases during high-price periods. Domestic production is therefore greatest in periods of reduced consumption and smallest in periods of increased consumption. It should be noted, however, that fluctuations in production look like ripples on an otherwise smooth surface when compared to the magnitude of the fluctuations which have occurred in consumption levels.

The Competition of Foreign Wools

Australian, New Zealand, South African, Argentinian and Uruguayan wools are imported into the United States. In the five-year period from 1947 to 1951, for example, an annual

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[2] Domestic Wool Requirements and Sources of Supply, p. 68, and Appendix Table 7.

average 236.5 million pounds of wool (clean content basis) were imported, of which 94.6 million came from Australia, 53.8 million from Uruguay, 41.1 million from Argentina, 18.1 million from New Zealand, and 17.4 million from the Union of South Africa.[3]

The quality of imported wools generally surpasses that of domestic wools. The superior quality of foreign wools can be attributed to the natural advantages for wool growing possessed by the countries concerned, and to their husbandry and marketing practices. The Australian industry alone will be described below. Australia is the world's leading producer of apparel wool, both with respect to quantities and quality of wool produced, but the Australian industry is not sufficiently different from those of other large exporting countries to warrant their separate description.

The Australian people number about 7.5 million in a land area of about 3 million square miles.[4] About a fourth of the total land area is devoted to sheep pastures.

Sheep flocks in Australia vary in size up to 100,000 and over, but those of 2,000 to 5,000 are most numerous and contain 23 percent of the total. Flocks of smaller size than this contain 35 percent of the total, and the larger ones, 42

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[3] Wool, Wool Tops, and Carbonized Wool, Statistical Appendix.

[4] Donald M. Blinken, Wool Tariffs and American Policy, p. 21.

percent of Australia's sheep population.[5] In 1949-1950, Australian production was 1,150 million grease pounds;[6] that of the United States was 265 million pounds. Almost all Australian sheep are bred for wool and about 80 percent of the Australian clip is wool of grade 64 and finer.[7]

The quality of Australian wool can, in part, be attributed to the fact that many sheep pastures are treeless grasslands; some, generally in the interior, are lands covered with an indigeneous shrub which has also been found suitable for sheep grazing. In the United States, except in Texas and in parts of California, much of the land now devoted to sheep is rough, poor pasture. Quality of pasture influences the quality of the wool. In addition, the Australian pastures keep the grease and burr content of the wool at relatively low levels. Thus, Australian wools are cleaner and shrink less than American wools.

It is not possible to compare Australian and American costs of production, accurately or in detail. Australia is a relatively undeveloped nation with a low population density. Since she can take full advantage of the economies of large-scale production, costs are undoubtedly a good deal lower in Australia. One might make a very rough guess of comparative

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[5] Concerning Wool, p. 23.

[6] Ibid., Addenda.

[7] Blinken, op. cit., p. 20.

labor costs after reading the following quotation, which mentions war and pre-war wages in the United States. It should be noted that flocks are much smaller in America and each flock, in the West, requires one or more sheep herders. ". . . on the flat sweeps of Australia, a sheep herder can handle a flock of 4,000 (and an Australian sheepherder makes at most $90 a month with board) . . . . Before (the Second World War), an experienced American sheepherder was paid $65 a month for a seventeen-hour day, plus board and bare necessities. Now (1947), with or without experience, he wants $150 to 200, an eight-hour day, a vacation with pay, and a radio."[8]

Australian sheep are machine-shorn at the ranch. Shearing and "classing" crews move from ranch to ranch during the shearing season. Australian practices differ from American practices principally in the fact that fleeces are graded at the ranch, and in the care and skill with which the wool is handled. Each fleece is picked up as it is sheared and "skirted," that is, its outer portion is cut off. Since this outer portion is likely to contain the lower grades of wool in the fleece as well as tags (locks matted with sweat and manure) and stained and burry wool, skirting--depending on how "deep" and careful the skirting--roughly divides each fleece into quality lines. (See Figure 3, page 19.) The

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[8]"The Trouble with U. S. Wool," Fortune, XXXV (January, 1947), p. 93.

skirted fleece is then handed to the wool grader who places it in one of the bins next to him, according to his judgment of its quality. The wool which has been skirted off and other inferior parts of the fleece are classed, at the same time, and separately.

When there are a sufficient number of fleeces in one bin, the wool is pressed into wool packs, each weighing about 360 pounds. Each bale is branded and weighed, and the number, description and weight are immediately entered in the wool book.

Wool is sold at auction, through the intermediary of wool brokers, to whom the wool has been consigned by growers. The Australian grower, in contrast to his American counterpart, sells a graded product and directly benefits from whatever superior qualities his wool may possess.

Adequate and uniform ranch preparation is assured through the broker and auction system. The technicians who supervise the skirting and grading have to be approved by the wool broker and the penalty for a grower's failure to meet established standards is his exclusion from the wool auction. Since auctions are almost the only outlet for wools, the penalty is effective.[9]

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[9]D. W. Carr and L. D. Howell, Economics of Preparing Wool for Market and Manufacture, p. 5.

The greater uniformity in grade and type, and the superior quality of foreign wools is illustrated in a study made by the United States Department of Agriculture in which two large lots of typical Texas and Australian wools were compared.[10] The Texas wool showed a larger proportion of black--especially undesirable for fabrics in pastel shades--painted and stained wool. Losses in sorting the Texas wool, almost double that of the Australian, indicated excessive quantities of trash in the Texas wool. The Texas lot included strings, used in the United States to tie the fleeces. If sisal string is used, the sisal fibers damage the fabric made from the wool. The Texas lot contained 27 percent of wool too short for combing--that is, wool unsuited to worsted manufacture--whereas all the Australian wool was of combing length. The Australian had a higher concentration within the main sort and within one grade on either side of the main sort--almost 97 percent for the Australian compared with 88 percent for the Texas wool. Foreign wools are almost always more concentrated within the main grade. Some manufacturers claim that Australian wools also give a better "handle" to the fabric and that, grade for grade, the foreign wool is finer.

In spite of the superior qualities of foreign wools, domestic wools have been able to maintain a competitive advantage in the domestic market thanks to the wool tariff.

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[10]Appendix Table 8.

A detailed discussion of this question more properly belongs in the later chapter on the wool tariff. Suffice it to say here that recent developments in textile manufacturing have made the tariff less effective than formerly, in protecting domestic growers.

Manufacturers' preference for foreign wools has increased in direct proportion to increases in the cost of labor. Wages accounted for about 43 percent of gross operating margins of woolen and worsted manufacturers in 1947.[11] Average hourly earnings of workers in the wool industry rose from about 53 cents in 1939 to $1.55 in 1945.[12] Manufacturers are reducing the total number of workers they employ by increased mechanization. They are also trying to reduce the number of highly skilled and higher paid workers. In order to do so, the raw material has to be sufficiently uniform to require minimum handling.

A minor revolution in textile machinery occurred after World War II. It was stimulated by developments in cotton manufacturing machinery, and new techniques in spinning and weaving, invented to meet the particular needs of the rayon fiber. As an outgrowth of the developments in the rayon industry, the "American" system, a short-cut method of preparing the wool for spinning together with an improved spinning

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[11] D. W. Carr and L. D. Howell, op. cit., p. 47.

[12] Ibid., p. 49.

frame, was introduced in worsted manufacturing. Improvements have also been made in other spinning machinery and in the weaving machinery of both the woolen and worsted systems.

The increased speed and capacity of the new machines as well as their simplicity of operation, have enabled manufacturers to reduce the number of workers employed. But, to operate efficiently, these high-speed machines require a highly uniform fiber stock. If the stock is not uniform, breaks occur in the roving (or yarn) at high speeds, and the machine stops. The cost of the labor attending the machines then becomes high. Wools that contain paint and tar tips, fibers of varying lengths and diameters, and weak fibers, are especially unsuited for use on these machines. Under these circumstances, manufacturers prefer highly uniform wools. They can well afford the extra expense.

Because of the quality and preparation differential, Australian wool generally commands a higher price, duty paid, in the Boston market than do American wools of the same grade. Since 1930, Australian wools have been consistently higher in price than comparable domestic wools, except from 1940 to 1945. The rise in American prices from 1940 to 1945 can be attributed to high price supports and other protectionist measures adopted by the United States government during World War II. During the 1930's, Boston prices of Territory wool, staple, 64's and finer, scoured basis, averaged about 86 percent of the corresponding prices of Australian duty-paid

wool.[13] A study of wool prices made in 1937 by the United States Tariff Commission estimated that from 1924 to 1935, the net effect of all factors, other than the duty, affecting wool prices, resulted in an average differential of 5.8 cents per scoured pound in favor of Commonwealth wools. Differences in preparation between foreign and domestic wools were estimated at 8 cents for fine wool, 6 cents for moderately fine and 5 cents for coarser wools.[14] A study made in 1947 showed an average differential of 9 cents in favor of foreign wools.[15] The differential may be even higher at the present time. It should be noted, however, that Australian wools in bond, that is, before payment of duty, have been consistently lower in price than similar domestic wools.

The Competition of Non-Wool Fibers

It was previously mentioned that wool consumption depends on the level of personal incomes. The price of wool was not discussed as a factor influencing consumption.

Wool prices would not influence consumption if there were no substitutes for wool. In fact, all textile fibers may be substitutes or partial substitutes for one another, depending on the dictates of fashion and other considerations.

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[13] Appendix Table 9.

[14] D. W. Carr and L. D. Howell, op. cit., p. 46.

[15] Blinken, op. cit., p. 46.

The heavy winter cottons, a new fashion in women's wear, are an example of cotton-wool competition, although these two fibers are not usually considered as having similar characteristics. In this inter-fiber competition, the relative prices of different textiles undoubtedly play a role. Wool is one of the most expensive textiles. In 1952, a scoured pound of territory wool, 64's and finer, cost 165 cents, a pound of cotton, 38.8 cents, and a pound of acetate rayon, 42.4 cents.[16]

In general, of course, the more alike the competing fibers, the fiercer the competition between them. Five synthetic fibers: Nylon, Orlon, Dynel, Dacron and Acrilan, and the regenerated protein fiber, Vicara, most closely share some of the formerly unique attributes of wool, and, therefore, seem to pose the most serious threat. In 1954, most of these synthetics were about as expensive or more expensive than wool.[17] In late 1955, the prices of Acrilan, Dacron, Dynel, Nylon and Orlon were substantially reduced. The reductions ranged from 20 to 30 cents a pound.[18] These wool-like synthetics have but recently come onto the market. It is probable that they will become cheaper and cheaper as methods of production improve, production expands, and ways of reducing costs of production are found.

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[16] Achieving a Sound Domestic Wool Industry, p. 81, and Appendix Table 7.

[17] Appendix Table 7.

[18] The Wool Situation, February 21, 1956, p. 9.

In textile manufacturing, the cost of the raw material represents a relatively small percentage of total costs of production. The differential in the prices of different textiles is therefore less important than relative processing costs. It was previously mentioned that new developments in textile machinery make necessary the use of a highly uniform fiber. It goes without saying that machine-made synthetics are more uniform and better adapted to standardized machine techniques, than any natural fiber, and that, therefore, their processing costs are lower.

A second attribute of the new machines, not previously mentioned, is that one can shift from one kind of fiber to another. The ability to use cotton, rayon, acetate, other man-made fibers and wool in the same plant, opens new possibilities in the variety of materials which can now be manufactured.

Wool consumption as a percentage of total fiber consumption appears to be declining, while the consumption of synthetics has steadily increased. In 1924, apparel wool was 8.1 percent of total mill consumption of textile fibers. In 1951, 5.6 percent was apparel wool.[19] It is also interesting to note the cyclical variations in the wool percent consumed. A drop to 5.3 percent of total mill consumption in 1934 can be attributed to the shift away from wool to less expensive textiles during the depression.

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[19] Achieving a Sound Domestic Wool Industry, p. 76.

The outlook for wool is perhaps less bleak than it would appear from the foregoing. Synthetics though approaching wool in suppleness, warmth and resilience, still lack the "feel," the warm softness peculiar to wool. On the contrary, many have a certain feeling of clamminess and are inferior in their power of holding and excluding heat. The unique properties of wool may continue to give it a certain competitive advantage, particularly for special cases. Moreover, the greatly increased versatility of textile machinery should open new outlets for wool, used in mixtures with other fibers. The raw material itself may be "synthetized." The process of mercerizing cotton was evolved to give it a more silk-like appearance. Similar developments may occur in the case of wool. Wool interests are at present promoting research in the chemical and physical properties of wool, in the hope of discovering methods of improving the natural fiber. In the "blurring" of the differences between one fiber and another, a new and better wool may find a new place. It is obvious, however, that the forces marshalled against the more poorly prepared and poorer quality domestic wools will not be so easily overcome.

CHAPTER IV

THE WOOL TARIFF [1]

The first governmental action, specifically concerning wool, was the Tariff Act of 1816. Since then, every tariff act, almost without exception, has provided protection for wool and wool manufacturers. The history of wool tariffs is a reflection of the economic history of the wool industry, and of the country itself. Tariff act succeeded tariff act in monotonous repetition, as America transformed itself from an agricultural to an industrial country. Wool manufacturing developed; population increased and pushed the frontier further and further west; sheep moved from the east to the mid-west and finally, from the mid-west to the far west. The National Association of Wool Growers and the Association of Wool Manufacturers played a part in the shaping of government policies. The wool lobby was, in fact, one of the most successful industry groups in obtaining government protection. As we shall see in succeeding pages, whenever prices fell or foreign competition threatened to become more severe, tariff rates increased. During periods of prosperity, they tended to decline.

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[1] Unless otherwise indicated, the historical material in this chapter is based on information found in The Tariff on Wool by Haldor R. Mohat and The Tariff on Wool by Mark A Smith.

The American economy, at the beginning of the nineteenth century, was a rural economy. Foreign demand for American agricultural products permitted the import of manufactured articles. The finer wool fabrics were imported from Great Britain. American wools were spun and woven into a coarse cloth, the "homespun" and, in the main, consumed on the farms on which they had been grown. The few woolen mills then in existence supplied a narrow market, hedged by British imports on the one side and by household manufactures on the other.

Foreign trade came to an end under the Embargo Act in late 1807, the Non-Intercourse Act of 1809 and, finally, with the outbreak of war in 1812. American woolen mills--of which there were 24 in 1810--and household industries increased production to meet army demand for coarse woolens as well as to meet the demand for broadcloths, which Britain had previously supplied. Household production remained the more important, but domestic mills increased output three or four-fold during the war.[2] Sheep numbers and wool production increased, stimulated by the increased consumption of mills and household industries, and by the disappearance of foreign markets for other farm products.

As soon as the war ended in 1815, cheap British woolens were again imported in large quantities. In Britain and in the United States, a period of recurring crises--which was to last until 1830--had begun. In an attempt to check

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[2]Mark A. Smith, The Tariff on Wool, p. 99.

the flood of imports, the Tariff Act of 1816 imposed ad valorem duties of 15 percent on wool and 25 percent on woolen goods.[3]

The tariff on wool increased in 1824, 1825, and 1826. After the crisis of 1825-26, Britain is said to have thrown particularly large quantities of goods on the American market at prices which, in some cases, did not cover the cost of production.[4] In the Tariff Act of 1828, the wool duty consisted of a specific rate of 4 cents a pound and an ad valorem duty of 40 percent. Under this Act, the tariff was to increase to 4 cents a pound and 50 percent ad valorem in 1830.

Almost no raw wool was imported during this period. Some wool was, in fact, exported to Great Britain. Despite the tariff, Britain continued to dump woolens on the American market, until 1830. By this time, business conditions in Britain had improved and the survivors among manufacturers and growers in the States had become more capable of holding their own in a climate of tempered competition.[5]

With a return to prosperity, and with wool prices rising in domestic and world markets, tariffs were reduced in 1832

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[3]Each tariff act imposed duties on wool and wool manufactures. Duties on wool manufactures later consisted of a specific rate to compensate for the cost of the duty on raw wool together with an ad valorem rate to protect domestic manufactures from foreign manufactured imports. Only the specific compensating duty on manufactures will be discussed in the following pages. Protective ad valorem rates increased and decreased as the tariff on raw wool increased and decreased.

[4]Smith, op. cit., p. 101.

[5]Haldor R. Mohat, The Tariff on Wool, p. 7.

and 1833. Under the Act of 1833, duties exceeding 20 percent were to be reduced, by annual installments, to a uniform rate of 20 percent on all articles by 1 July 1842.

The crisis of 1837 brought with it a sharp break in the price of wool. Prices recovered somewhat during the next two or three years, but prices from 1840 to 1846 remained generally below the levels of the 1830's. Higher rates were imposed under the Tariff Act of 1842, a frankly protectionist measure, despite the fact that the agitation for the Act was largely based on a deficiency in Federal revenues. A 5 percent duty was levied on wool costing 7 cents a pound or less and a duty of 3 cents and 30 percent was imposed on wool costing more than 7 cents.

During the highly prosperous period from 1846 to 1860, there was little agitation of the tariff question. Tariff rates were lowered in 1846 and again in the Act of 1857.

From 1830 on, domestic manufacturing had expanded as household manufacturing declined. Sheep numbers increased from 12 million in 1830 to 19.3 million in 1840 and from 21.7 million in 1850 to 22.5 million in 1860. Eastern growers reaped most of the benefits of the high wool prices during the 1830's as little wool was then being shipped from the Mid-West. After 1840, the increasing urbanization of the East made dairying and diversified farming more profitable than sheep husbandry. Total sheep numbers declined in the East and fine-wool sheep were increasingly replaced by

dual-purpose breeds. Concurrently, increased settlement and improvements in rail and water transport in the states bordering the Ohio, Mississippi and Missouri rivers brought about an expansion of wool production in these states. Sheep numbers increased rapidly in the Mid-West, from 1840 to 1850 and at a slower rate from 1850 to 1860. The 1840's were a period of low farm prices and although wool prices were also low, Mid-Western farmers found wool more profitable than alternative enterprises. After 1853, in contrast, all farm prices were high. With wool prices higher than they had been during the '40's, Western farmers neglected sheep in preference to meat and grain for export.

The Civil War brought with it an unprecedented demand for wool, attributable, in part, to the necessity of supplying an army of a million men and, in part, to the scarcity of cotton which wool and flax were largely to replace. It is estimated that wool production doubled during the war. A production of about 80 million pounds in 1860 increased steadily until it reached 168 million pounds in 1867. Pre-war trends in the sheep industry abruptly reversed themselves. Sheep numbers increased in the East and rose phenomenally in the Mid-West. Western dominance of American wool-growing which had been eminent before the war, was postponed. New settlers in the West could not afford to buy merino sheep at highly inflated prices. Only in California, Oregon and New Mexico were sheep which previously had been raised primarily for meat, bred for wool.

The duty on wool was increased in the Tariff Act of 1861 and, again, in the Act of 1864. The primary purpose of both acts was to provide additional revenues for war purposes. But the absence, in Congress, of free trade advocates from the South made it easier to adopt protectionist measures.

The Tariff Act of 1861 introduced the system of compensatory rates on manufactures which was to become a permanent feature of future tariff legislation. It is obvious that a duty on wool, if it does in fact raise the price of imported and domestic wools, will raise manufacturers' raw material costs by the same amount. The duty would thereby provide a competitive advantage to foreign manufacturers using cheaper wools. Tariff acts prior to 1861 protected domestic manufactures by providing higher duties on woolen goods than on wool. In the Act of 1861, as in previous acts, a duty on raw wool and a higher protective ad valorem duty on manufactures were imposed. In addition, a specific duty was levied on cloth and dress goods to compensate manufacturers for the wool duty. The compensating rate--in this and later acts--was arrived at by multiplying the wool duty by four on the premise that wools shrank an average 75 percent, 4 pounds of grease wool being required in the manufacture of one pound of cloth.

Thus, in the Act of 1861, the duty on wools costing 18 to 24 cents a pound--the most important class--was 3 cents. The compensatory duty on manufactured articles was 12 cents.

One should bear in mind that, at this time, the more important competitive threat still came from foreign manufactured goods and not from imports of raw wool, the latter representing perhaps a fourth or a fifth of domestic consumption. It is doubtful, therefore, whether raw wool prices were raised by the full amount of the tariff. Nonetheless, the compensatory system was based on the reasoning that they were.

In 1865, state growers associations united to form the National Wool Growers Association. The National Association of Wool Manufacturers and the Growers Association then met in convention, at Syracuse, and pledged their joint support of higher duties on wool and woolens. The Syracuse Convention formally established the "united front" of growers and manufacturers which was to exert such a powerful influence on government wool policies from 1865 on. Indeed, the recommendations of the Tariff Commission and of Congressional committees, and the wool duties themselves did not differ, in any important respect, or, for very long, from the policies of the two associations.

The "united front" may have been less united than it would at first appear and not altogether representative. The worsted manufacturers are said to have dominated the National Association of Wool Manufacturers from its inception. The burden of a specific tariff on raw wool fell more lightly upon them since the worsted industry uses the most expensive

wools. Moreover they generally use wools of light shrink. The compensating system, calculated as it was, on the basis of a maximum shrink, gave them additional protection. The woolen industry using cheaper wools, of higher shrink, found the specific duty on wool equivalent to very high ad valorem rates for which the specific compensatory duty on manufactures was insufficient compensation. The first protests from the woolen industry were heard at the time of the Syracuse Convention and later culminated in the formation of the Carded Woolen Manufacturers Association, in 1909. The woolen manufactures at first opposed duties on wool. Later, they pleaded for ad valorem rates or rates of duty somewhat more consistent with the values of different wools.[6]

A wool schedule passed by Congress as a separate act, in 1867, doubled the high rates of the Act of 1864. The newly formed alliance between growers and manufacturers exerted a powerful influence on the terms of the Act of 1867 and, in addition, devised a new, more minute, system of wool classification.

The Act of 1867 divided wools into three classes: Class I, "clothing" wools; Class II, the longer, "combing" wools; and Class III, carpet wools.[7] Foreign wools competitive

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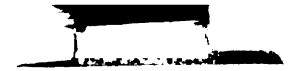
[6]Mohat, op. cit., pp. 20-21.

[7]Carpet wools were separately listed for the first time in the Tariff Act of 1867. Although they are not competitive with American wools, a duty was levied on them, in every tariff act from 1816 on, up to and including the Act of 1909. They later became duty free. As stated in the introduction, carpet wools have been omitted from the present discussion.



with American wools fell mainly within Class I. Wools in Class II were partly competitive and became more competitive as worsted manufacturing became increasingly important. Class I and II wools paid a duty of 10 cents and 11 percent ad valorem if worth 32 cents a pound or less and 12 cents plus 10 percent if worth more than 32 cents a pound. If Class I wools were washed, the rates were doubled. Scoured wool, of both classes, paid triple rates.

The enormous demand for wool during the Civil War came to an end with the war's conclusion. Production and prices had reached dizzy heights. Curtailed post-war demand led to the collapse of the wool market in late 1867. Sheep were slaughtered in great numbers or driven to the west. Total numbers declined by about a third, from 35.8 million in 1867 to 22.4 million in 1871. The pre-war trend toward westward migration of the sheep industry, temporarily arrested by the Civil War, resumed its course. After the war, sheep numbers dropped from 37.6 to 24.5 million in the East and increased from 7.4 to 9.6 million in the West. The cost of raising sheep, at about this time, was estimated at roughly $2.65 per head in the East and 50 cents a head in the West.[8]

The post-Civil War period was the period of the final frontier. Between the Civil War and World War I, the geographical configuration and the industrial might of present-day America took on visible form. Population doubled between 1870

[8]Carleton M. Allen, Wool, the Raw Material, p. 5.

and 1900. A growing industrialization led to a great expansion in wool manufacturing as a whole, and to the rapid development of worsted manufacturing. Worsted manufacturing consumed 3 million pounds of wool in 1860, 100 million in 1890. In 1870, the value of production on the woolen system had been $155 million, that on the worsted, $22 million. The woolen and worsted industries were of about equal size in 1900. By 1910, the worsted industry produced $312.6 million while the woolen industry produced only $107.1 million worth of goods. Wool consumption did not increase in proportion to the increase in population. Per capita consumption of wool was less in 1900 than it had been in 1860. During this period, more and more shoddy (reworked wools) and cotton came to be used in the manufacture of certain articles, formerly made entirely of virgin wool.

As settlement progressed in the Far West, sheep were increasingly displaced by other types of agriculture in such states as California, New Mexico and Texas. Much of the West, however, is arid or semi-arid country, suitable only for ranching. But the grazing lands which can support sheep can generally support cattle as well. At the present time, cattle are pushing out sheep, much as diversified farming pushed them out in other regions at an earlier date. Sheep are likely to remain only in areas where water and herbage are too scant for cattle.

The Tariff Act of 1867 had established a wool schedule which reappeared, with minor variations, in successive tariff legislation until the Act of 1921.
Over the entire period, rates slightly increased. The system of classification of wools also remained the same from 1867 to 1922. This "permanent" tariff, as it were, was twice interrupted, from 1894 to 1897, and from 1913 to 1921, when wool was placed on the free list.

The Republican Party ascribed "all the country's blessings to the wonder-working policy of protection,"[9] while the Democratic Party held opposite views, although protectionists and free traders in Congress were not divided strictly according to party affiliation. Cleveland and Wilson supported the lowering of tariff barriers. Before the passage of the Act of 1894, the Crisis of 1893, and the depressed agricultural prices which followed, led to a compromise bill whereby wool was one of the few commodities put on the free list. Popular feeling which had earlier favored the lowering of barriers, again swung to high tariffs and the duties were restored in 1897. The prosperity which followed seemed to strengthen the protectionists' hand, but the crisis of 1907 was followed by a period of depressed prices which the Tariff Act of 1909 seemed unable to prevent. Political sentiment turned against the Republican Party, largely defeated by its own argument, and free traders in Congress, better organized

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[9] F. W. Taussig, The Tariff History of the United States, p. 410.

and more unified than they had been in 1894, passed the Tariff Act of 1913. Only the tariff on raw wool and the compensatory duty on manufactures were removed in the Acts of 1894 and 1913. The ad valorem protective duties on manufactures were retained in both Acts.

As one enters the current period, the basic theme: low tariffs during periods of prosperity, high tariffs during periods of adversity remains unchanged. Tariffs in the Acts of 1921 and 1922, after the crisis of 1920, and in the Act of 1930, with the beginnings of the great depression, were higher than they had ever been before. Yet the "background" and, with it, the raison d'etre of the tariff had changed utterly. During the nineteenth century, the arguments for a tariff centered around the need to protect infant industries. Raw material tariffs were an appendage of the more vital tariff on manufactures. Raw wool imports, though gradually increasing, were small compared to domestic production and consumption. In the industrial economy of twentieth century America, the burden of comparative disadvantage falls most heavily on the wool grower. Manufacturing interests are far more capable of holding their own--with or without a tariff.

It was during World War I that wool imports for the first time exceeded domestic production. Imports rose from 63 million in 1913 to 378 million in 1918. Domestic production was 267 million in 1913 and 254 million in 1918.

Prices climbed steeply during the war. Fear of a shortage at the beginning of the war had led to heavy government buying. Immediately after the war, a consumers' strike, in protest against continued high prices, caused wholesale cancellations of orders by manufacturers. In addition, the American government possessed wool stocks almost equal to a year's supply,[10] which had to be liquidated. The bottom dropped out of the wool market in May, 1920. The "emergency tariff" of 1921 was passed and remained in effect until the passage of the Tariff Act of 1922. Rates in both acts were prohibitive.

The Act of 1921 imposed a duty of 15 cents per unwashed pound, 30 cents per washed pound and 45 cents per scoured pound on apparel wools, and a specific compensating duty of 45 cents on manufactures. Since raw wool which had been in any way improved by removing part of the fleece was to pay double duty and since almost all foreign fleeces are skirted, the rate per unwashed grease pound was in fact 30 cents.

Tariff acts prior to the Acts of 1921 and 1922, it will be recalled, divided wool into three classes, clothing, combing and carpet. The shorter apparel wools, including merino wool, belonged to the clothing class. Changes in combing machinery had made it possible to use these shorter fibers in worsted manufacturing. Thus the distinction between clothing and combing wools had long been obsolete. In the Tariff Act of

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[10]Smith, op. cit., p. 142.

1922, wools were divided into two classes: the first, consisting of wools "not improved by the admixture of Merino and English blood," i.e., carpet wools; the second, of wools "not especially provided for," namely, apparel wools. The Act of 1922 also replaced the antiquated blood system of wool classification with the more modern count system.

The continued depression in the wool industry, after the passage of the Act of 1921, had led growers to press for a permanent enactment of the high rates of the "emergency" tariff. Rates in the Tariff Act of 1922, while not as high as in the Act of 1921, were higher than in any previous acts. Of greater significance, perhaps, is the fact that behind the many changes made in the wool schedule in 1922, one can clearly see the shift towards an increase in the protection of raw material producers and a decrease in the protection of manufacturing interests. The growers gained and the manufacturers lost, through two important changes. The duty was levied on the scoured pound, instead of on the grease pound, as formerly, and the concealed protection enjoyed by manufacturers under the old compensatory system was reduced.

Under the Act of 1922, apparel wools were taxed at 31 cents per pound of clean content. Since the percent of grease and foreign matter varies greatly according to the type of wool, a duty levied on the clean pound would, on the face of it, appear more equitable. The old duty has indeed

been facetiously characterized "as a duty on dirt."[11] At the same time, it must be remembered that the clean yield of foreign wools averages 60 percent whereas that of domestic wools averages 40 percent. In other words, an average grease pound of foreign wool yields 3/5 of a clean pound; a pound of domestic wool, 2/5 of a clean pound. The duty of 11 cents per grease pound of the Tariff Act of 1909, for example, thus amounted to less than 9 cents' protection for each grease pound of domestic wool. The duty therefore taxed light shrinking wools at a lower rate than wools of heavier shrink. The old duty thus tended to favor manufacturing rather than grower interests. In the Act of 1922, light shrinking wools lost their former advantage over the less well-prepared wools. By levying a duty on the clean pound, the Act of 1922 thus effectively raised the tariff on raw wool.

Manufacturers' concealed protection was further whittled away by the compensatory rates established in the Act. Since 1861, the compensatory duty had been calculated on the assumption that 4 pounds of grease wool were required in the manufacture of one pound of cloth. If foreign wools shrink only 40 percent, the extra bounty to manufacturers is readily apparent. Under the Act of 1922, the compensatory ratio was changed to a more realistic 1 1/2 pounds of scoured wool to one pound of cloth. The compensatory duty, levied on the wool

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[11] Taussig, op. cit., p. 459.

content of the cloth, and not upon the full weight of the fabric, as formerly, was fixed at 45 cents a pound.

In the Act of 1922 and in succeeding acts, the duty levied on carpet wools was to be refunded if the wools were in fact used in the manufacture of floor coverings.

The Tariff Act of 1930 raised the apparel wool duty to 34 cents per scoured pound, for wools finer than 44's, and imposed a compensatory duty of 50 cents on manufactures. As a concession to the woolen industry, a new small class of wools, finer than 40's, but not finer than 44's, was taxed at 29 cents per clean pound.

In 1948, as part of the American concessions under the General Agreement on Tariffs and Trade, the duty on wools finer than 44's was reduced to 25 1/2 cents per clean pound, that on wools 40 but not finer than 44's was reduced to 17 cents a pound.

The fluctuations in wool production and consumption levels, attributable to the "ups" and "downs" of the business cycle, were described in chapters II and III. It was noted that supply tends to increase during low price periods and to decrease during periods of high prices whereas consumption levels fluctuate in an opposite sense. Increased consumption coincides with high price periods, and vice versa. Finally, although both demand and supply fluctuate, supply may be considered as relatively steady. Supply fluctuations are of negligible size if one compares them to the fluctuations in amounts consumed.

Thus, during a depression, domestic supply equals or nearly equals domestic production. During a period of prosperity, in contrast, consumption exceeds production. Whenever consumption is greater than production, the resulting gap is filled with the requisite quantity of imports. In 1932, total scoured mill consumption fell to 188.5 million pounds. Domestic production was 175.4 million pounds and imports were 13.1 million pounds. Foreign wool accounted for 6.9 percent of total mill consumption; domestic wool, for 93.1 percent. In 1946, total consumption was 609.6 million pounds. Of this, 106.9 million pounds were domestic wool, and 502.7 million, foreign wool. Foreign wool accounted for 82.5 percent of total mill consumption, and domestic wool for only 17.5 percent.[12]

The demand and supply equation of wool can best be described in the following terms: on one side of the equation, a domestic demand which increases or decreases with the fluctuations of the business cycle, but which, at a given time, is fixed; on the other side, a supply--consisting of both foreign and domestic wools on the United States market--which can increase or decrease at will, as it were, and whose magnitude, at any given moment, depends on consumption requirements. This is, of course, a somewhat simplified analysis. Nevertheless, the evidence does point to demand as the determining

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[12]Appendix Table 11.

influence. Prices seem to play a subsidiary role, being themselves determined by the demand-supply relationship at any given moment. And, perhaps because of the world demand for dollars, or for other reasons, foreign supplies do tend to gravitate towards the United States market whenever demand increases.

The regulatory mechanism permitting the entry of only the requisite amount of foreign wool is, of course, the tariff. It was pointed out, in preceeding pages, that tariff rates tend to increase during periods of oversupply and vice versa. The cyclical role of the wool tariff is further enchanced by its specificness. Obviously, a duty of 34 cents a pound when wool costs 33.9 cents a pound, as it did in 1932, is more onerous than the same duty if wool costs 115.5 cents a pound, as in 1945.[13] The tariff tends to reduce imports during low price periods, and to provide that a smaller domestic market will first absorb domestic production.

A number of studies[14] have been made on the impact of the tariff on wool prices. Since wool imports, in recent times, are a substantial percentage of domestic consumption, and since American imports account for a substantial share of world trade in wool, the tariff has, in the main, been very

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[13] Prices quoted are for graded territory wool, fine average and good French combing, clean basis, Boston, July. See Wool Statistics and Related Data, p. 83.

[14] See, in particular, Haldor R. Mohat, The Tariff on Wool, E. Dean Vaughan, The Benefits and Costs of the Tariff on Wool, and Valda M. Scales, The Effects of the United States Wool Tariff at Varying Rates on the Australian and United States Wool Industries and Trade in Wool.

effective in raising the prices of both domestic and foreign wools on the American market. Prices of foreign wool are probably not raised by the full amount of the duty, as some studies assume, but by a substantial portion of it. Domestic prices are raised by this amount, less the foreign-domestic quality differential previously mentioned. It should be noted, however, that the price impact of the tariff will be large or small depending on the quantity of imports. As has been just discussed, the quantity of imports is large during prosperous periods and small during periods of depression. Moreover, United States imports accounted for an average 11 percent of world trade in wool during the period 1934 to 1938, and 30 percent of the world wool trade, in 1948.[15] If one tried to assign a numerical value to the price impact of the tariff, one could thus correctly do so only for a period of a very few years.

If a tariff is to be effective in protecting the domestic market for domestic producers, the rival domestic and foreign products must be competitive in some important uses. It goes without saying that a tariff cannot protect a product from its domestic competitors. In recent times, the position of domestic wool has been seriously undermined by the attacks upon it of superior quality foreign wools and of synthetic fibers. (See Chapter III.) If manufacturers are willing to

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[15] Albert M. Hermie, Prices of Apparel Wool, p. 7.

pay premiums for foreign wool, and use synthetic fibers instead of wool, the tariff of course becomes less effective in protecting the domestic market.

The first legislative attempt to supplement the tariff and reinforce the competitive position of domestic wool, was the Wool Products Labeling Act of 1939. Under this Act, "all products containing, purporting to contain, or in any way represented as containing wool or reprocessed or reused wool must be labeled."[16] The label must show the percentage of the total fiber weight represented by each kind of wool and the percentage of non-wool fibers present, if any.

Both manufacturers and growers supported the Act, but for different reasons. Manufacturers hoped the Labeling Act would help to protect the wool industry against the increasing competition of lower priced rayons. In an effort to meet rayon competition, manufacturers had also been using more and more reclaimed wool. The growers were chiefly concerned about this increased use of reclaimed wools. However, because it put a premium on "100 percent virgin wool" fabrics, the Act was probably of greatest benefit to the relatively few large firms specializing in the manufacture of such fabrics. These firms generally use the better prepared, more expensive foreign wools. As a consequence, domestic growers gained little or

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[16] D. W. Carr and L. D. Howell, Economics of Preparing Wool for Market and Manufacture, p. 18.

nothing from the provisions of the Act. Promotion of the sale of virgin wool fabrics tended to benefit foreign, not domestic, producers.[17]

The Wool Act of 1954, to be discussed in Chapter VI, is another measure which supplements and, indeed, almost supplants the tariff.

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[17] Ibid., pp. 18-19.

CHAPTER V

THE COMMODITY CREDIT CORPORATION AND THE PERIOD OF THE SECOND WORLD WAR

Few of the governmental assistance programs of the 1930's included wool. Commodity Credit Corporation loans were made available to wool growers in 1938, and again in 1939. The 1938 program included loans on the 1937 clip, unsold by 15 April 1938, as well as loans on the 1938 clip. Prices increased during 1938 and most of the loans were redeemed by growers. With the sharp increase in wool prices after the beginning of World War II in September 1939, few producers took advantage of the 1939 program. No price support programs were undertaken in 1940, 1941, and 1942.

Civilians annually consume about 2 scoured pounds of wool per capita. On a peacetime or training basis, an estimated initial issue of 75 scoured pounds of wool per man in the Army is required; on a combat basis, almost 100 pounds per man are required; after the first year, annual maintenance requirements are estimated at about 40 pounds per man.[1] During

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[1]John W. Klein, Wool during World War II, p. 7.

the five-year period, 1941 to 1945, military consumption amounted to roughly 1,547 million scoured pounds of wool.[2]

Under the terms of the Buy American Act of 1933, supplemented by other provisions of law, government agencies are required to buy supplies from domestic sources, when available, unless domestic prices are "unreasonable." Domestic prices, customarily, were considered "unreasonable" only when they were 25 percent or more above "the whole delivered cost" (including the tariff) of similar foreign goods.[3] Accordingly, all wool textiles supplied on government contract were to be made of domestic wool.

It soon became apparent that the larger-than-usual domestic production would be too small to meet war demand. In November 1940, an administrative order authorized the use of foreign wools in textiles manufactured under government contract. Domestic wools, if available in the requisite grades and quantities, were to be used in preference to foreign wools.

Prices of domestic wools had risen above duty-paid foreign prices at the beginning of the war. Ceilings on domestic and foreign wool prices, based on late 1941 market quotations, went into effect at the beginning of 1942. A differential in favor of domestic wools--amounting to roughly

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[2] Domestic Wool Requirements and Sources of Supply, p. 9.

[3] Staff Papers of the Commission on Foreign Economic Policy (Randall Commission), p. 315.

8 cents a clean pound--was thus maintained until 1946 when ceilings were lifted. Duty-paid foreign prices then advanced to approximately the normal peace-time price relationships, and the differential, once again, was in their favor.[4] As of March 1941, mills which used domestic wools in filling government orders were paid a premium to cover the difference between domestic and foreign prices.

In 1943, military consumption began to decline. Civilian consumption increased. When manufacturing for the civilian trade, wool mills used foreign wools in preference to the domestic product. The price and quality difference in foreign and domestic wools was a strong inducement to do so. Hoping to prevent a decline in domestic wool prices, growers applied "strong pressure for additional government protection."[5] Protection was granted in the form of a Commodity Credit purchase program, effective April 1943. The program provided that, with minor exceptions, all domestic wool not sold by April 25, 1943, was to be sold to, and purchased only by, the CCC. The program was extended, through yearly renewals, until the end of the war in August 1945. It was then continued on a permissive basis until April 15, 1947.

CCC purchases were made through the established wool trade. Private dealers, warehousemen, commission agents and

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[4]Appendix Table 9.

[5]Klein, op. cit., p. 30.

cooperatives were designated "handlers," if they were willing to comply with Commodity Credit regulations as to quantities purchased, maximum marketing fees, and resale to mills on government account. Three appraisers determined the grade and shrink of each lot of wool. Shrink was determined by the core test method. A boring tool extracts samples, which are then tested for shrinkage, from each lot of wool. The Corporation published a schedule of purchase prices, based on OPA ceiling prices, by grades, scoured basis at Boston. Growers were paid the official prices on an "in-weight-at-time-of-appraisal" basis, less handlers fees, transportation costs, grading or scouring costs as pertinent, and the CCC fee of 1 1/8 cents per pound to cover the cost of appraisal, storage, and interest.

Initially, growers' associations felt skeptical as to the government's ability to deal with the intricacies of the wool business. After a few years, they were unanimous in their praise of the program. In particular, the previous "take-it-or-leave-it" offers of wool dealers had been replaced by a detailed itemization of grades, marketing costs, and prices. Appraisal seemed to them more uniform and more impartial than in the past. Wool dealers, on the other hand, expressed strong opposition to the government program.

Purchase prices of the CCC averaged about 42.3 cents a grease pound. This was 141 percent of parity in 1943, but only 101 percent of parity in 1947, after the parity price had increased relative to Corporation purchase prices.[6] During

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[6]Appendix Table 11.

the war, the CCC sold wool at the price at which it had bought it. In December 1943, Corporation stocks were about 170 million pounds; by December 1944, they amounted to 324 million pounds; in December 1945, they were 461 million pounds. Wool stocks reached a peak 523 million pounds in September 1946.[7] In an effort to liquidate its stocks, the CCC lowered its selling prices by 7 cents a pound in November 1945, and again, in February 1946, by an additional 1 1/2 cents a pound. But as the CCC was prohibited by law from selling below parity, selling prices were raised, as parity prices increased. By the end of March 1947, selling prices in dollars and cents were about as high as they had been during the war.

The support program was discontinued April 15, 1947. It was resumed on August 5, 1947, after a bitter debate, in and out of Congress, on methods. The controversy reflected the new alignment of political and economic forces--together with the inevitable compromises between opposed interests--which was later to produce the Wool Act of 1954.

As originally passed by Congress, the Wool Act of August 5, 1947 provided, under authority of Section 22 of the Agricultural Adjustment Act, as amended, that the Secretary of Agriculture might impose an import fee up to 50 percent of, and in addition to, the duty then in effect, or import quotas,

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[7] Cumulative Supplement for 1945-46 to Wool Statistics and Related Data, p. 30.

or both, whenever he felt that wool imports threatened government price support programs.

Grower representatives attending the Congressional hearings, favored the imposition of import fees and quotas whereas the National Association of Manufacturers, at its annual meeting in April 1947, and during the hearings, expressed unanimous opposition. The alliance between growers and manufacturers, dating back to 1865, was broken. Evidently, the use of foreign wools reduced production costs to such an extent that, by 1947, manufacturers were willing to lose the political support of grower associations.

At about this time, in Geneva, representatives of twenty-three nations were discussing means of lowering international trade barriers. The United States representatives hoped for a modification in the British system of empire trade preference. In exchange, the United States was prepared to discuss tariff reductions on some 200 wool and wool manufactured items. Australia showed particular interest. When the news of the debates in the United States Congress reached Geneva, the representative of Australia returned home for new instructions. A representative of the United States did likewise, hoping to use his influence against the proposed legislation. Thus, United States foreign policy and, also, the need to sell industrial products to countries exporting raw materials conflicted with the American wool growers' desire for protection.

The President of the United States opposed "additional barriers to the importation of wool," and vetoed the Act, as proposed.[8] Subsequently, a new bill, in which the quota and fee provisions had been omitted, was passed by Congress and signed by the President.

Under the terms of the Act of 1947, and of a later Act in 1948, mandatory supports were maintained through June 1950, at the 1946 level of 42.3 cents a pound--101 percent of the April parity price in 1947, 94 percent of the parity price in 1948 and 1949. The Act of 1948, and another Act in 1949, provided that after 1 January 1950, wool prices would be supported at the level between 60 and 90 percent of modernized parity necessary to encourage a domestic production of 360 million shorn pounds. The 10-year moving base used to calculate the new parity price raised the parity price of wool by about 5 or 6 percent.

As mentioned above, CCC wool stocks reached a peak of 523 million pounds in September 1946. The Wool Act of 1947 allowed the CCC to lower its sales price, without regard to parity. As selling prices were lowered, and open market prices advanced in 1948 and 1949, then shot up with the outbreak of war in Korea, Commodity Credit inventories gradually declined. The Corporation was able to dispose of old stocks while fewer growers took advantage of the new loan and purchase

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[8] The Wool Act of 1947: Message of the President.

program. The last of the CCC wool stocks were disposed of during the summer of 1950. No wool was purchased under the 1950 and 1951 CCC programs. Loans were again granted to growers in 1952, 1953, and 1954.

From April 1943 through March 1950, the CCC purchased 1,634 million pounds of wool. Losses in disposing of this wool totaled $92,200,000 or about 10 percent of CCC losses on all commodities during its first 19 years of operation.[9]

From the preceeding discussion, it would seem that the tariff was, in the main, effective in reserving for domestic producers a part of the domestic market sufficient to absorb their production, so long as domestic wool's main competitive threat came from outside the United States, and the foreign-domestic quality difference did not play a leading role. The tariff became less effective as the competitive advantage of foreign wools increased and non-wool fibers began to encroach on raw wool markets. The CCC purchase program came to supplement the tariff. But, by this time, American wools were at such a comparative disadvantage that the CCC was faced with accumulating stocks and few buyers. A new approach to the problem had to be found. The new solution was, of course, the Wool Act of 1954 which will now be discussed.

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[9] Staff Papers of the Commission on Foreign Economic Policy (Randall Commission), p. 183, and Achieving a Sound Domestic Wool Industry, p. 29.

CHAPTER VI

THE NATIONAL WOOL ACT

Since the National Wool Act of 1954 attempts to find the solution which previous legislative efforts in behalf of wool have failed to find, it is, in itself, a summary of American wool problems, and policies. A complete discussion of the Act would thus involve all the factors which have been touched upon in the preceeding pages. Only a brief review of the most important of these factors will be presented in this concluding chapter on the Wool Act of 1954.

The Wool Act proposes "to encourage the annual domestic production of approximately 300 million pounds of shorn wool, grease basis, at prices fair to both producers and consumers in a manner which will have the least adverse effects upon foreign trade."[1]

An increase in production is to be encouraged through wool price supports up to 110 percent of parity. If the support price deemed necessary to encourage production is between 90 and 110 percent of parity, direct payments are to be made

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[1] It is unclear from the text of the Act whether 300 or 360 million pounds is the production goal of the Act. Part of Section 702 is quoted above. Section 703, however, which contains a detailed description of the methods of price support, states that the production goal is 360 million pounds. (See Appendix B.) Production has been less than 300 million pounds since 1945.

to growers. If it is between 60 and 90 percent of parity, loans, purchases and other operations will be used as methods of support. When direct payments are made, growers will be paid the difference between the national average price received by producers, during the marketing year, 1 April to 31 March, and the support level established for that year.

Since the Act became operative, in April 1955, direct payments have been used as the method of support. The support levels established for 1955, 1956 and 1957 are 62 cents a pound, 106 percent of the September parity price in 1955 and 1956, but only 101 percent of parity in 1957. Prices, not including government payments, received by growers, which had averaged 53.2 cents in 1954, fell to 42.8 cents in 1955 and 41.2 cents in September 1956.[2] Under the 1955 program, for example, a grower received, on the average, 19.2 cents for each pound of wool produced. The 1955 wool subsidy thus amounted to about 44.9 percent of the market price.

An individual grower is never of course the "average grower." Each grower, under the 1955 program, did not receive a 19.2-cent subsidy. He was paid the equivalent percentage of <u>his</u> receipts, that is, 44.9 percent of the market price of his wool. The amount paid to each grower is therefore proportional to the quality and grade of the wool sold and, since the subsidy is paid on a per pound basis, owners of

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[2] <u>The Wool Situation</u>, November 14, 1956, p. 6.

large flocks receive more than small growers. Average receipts to individual growers may be estimated from Table 1.

Total payments to growers under the 1955 program amounted to 56.3 million dollars, of which 49.1 million were payments on shorn wool.[3]

At the present time, direct payments are not used in support of other agricultural commodities. They have become necessary, in the case of wool, because of the increasing competition of synthetic fibers. Any method of price support which would tend to raise prices cannot be used. Synthetics have, as it were, placed an upper limit on wool prices. An upper limit has also been placed on domestic prices by foreign wools. Superior quality foreign wools would most certainly be used in preference to domestic wools, if foreign and domestic prices were equal. They are, at present, often used despite the fact that foreign duty-paid prices are higher than domestic prices. Domestic prices must fall to competitive levels, if domestic wools are to find the requisite outlets.

As previously mentioned, CCC wool stocks reached dizzy proportions during World War II. These stocks were accumulated during a period of very high demand and relatively high prices. The direct payments program solves the problem of stocks accumulating on government account since payments are

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[3]The Wool Situation, November 14, 1956, p. 11.

made on wool marketed privately, and no purchases are made by the government.

The incentive levels provided in the Wool Act, on the other hand, are not very different from the prices received by growers before the enactment of the law. Under the Act, the upper limit of price supports is 110 percent parity. In the eleven year period from 1940 to 1951, average prices received by growers were above or about equal to 110 percent of parity. Before 1940, except during the depression of the early 1930's, and in 1938 and 1939, prices received fluctuated between about 100 and 110 percent of parity. It seems probable, therefore, that the Wool Act will not cause a substantial increase in production. Production has indeed continued to decline since the passage of the Act. Domestic production was 235.8 million in 1954, 233.4 million in 1955 and 231.8 million in 1956.[4]

The production goals of the Act, especially if they are compared to the relatively small price incentives, appear pretentious. Since 1914, domestic production has equaled or exceeded 360 million pounds in 1931, from 1933 to 1935 inclusive, from 1938 to 1940, inclusive, and in 1943. It has equaled or exceeded 300 million pounds from 1928 to 1946, inclusive, and has been declining fairly steadily since then. It should also be noted that low-price periods have generally

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[4] The Wool Situation, November 14, 1956, p. 7.

TABLE 1

ESTIMATED RECEIPTS OF WOOL GROWERS UNDER THE 1955 PROGRAM, BY SIZE OF FLOCKS

Percentage of Sheep Farms Represented	Number of Sheep Shorn per Farm	Wool Produced[1]	Growers' Receipts		
			Wool @ 42.8 cents a pound	Subsidy	Total Wool @ 62 cents
60	Up to 25	212.5 or less	$ 90.95 or less	$ 40.80 or less	$ 131.75 or less
21	25 to 49	212.5 - 416.5	90.95 - 178.26	40.80 - 79.97	131.75 - 258.23
15	50 to 299	425.0 - 2,541.5	181.90 - 1,087.76	81.60 - 487.97	263.50 - 1,575.73
4	300 to 2500 and over	2,550.0 - 21,250.0 or more	1,091.40 - 9,095.00 or more	489.60 - 4,080.00 or more	1,581.00 - 13,175.00 or more

[1] Production is calculated by multiplying the number of sheep shorn by 8.5 pounds, the average weight per fleece in 1955.

been those of greatest production, and vice versa. Wool production was large during most of the 1930's.

Wool growing requires a frontier economy, one in which land is plentiful and cheap. As population increases, more intensive forms of agriculture become more profitable than wool. In an industrialized economy, the wool industry becomes more and more marginal, not only because of the scarcity of land, but also because of the increased labor required for smaller flocks and the increased cost of such labor. Wool growing then becomes a fringe industry, with a consequent deterioration in the quality of wool produced. In an industrial economy, wool growing is economic only on the poorest land, unsuited to other agricultural pursuits. Its continued existence depends on its relative profitability. In periods of depression, labor and land costs may decline sufficiently, so that, for a time, wool growing becomes more profitable than alternative enterprises. But the more mature the economy, the less likely it is that this will happen. As the industrial sector of the economy becomes larger and larger, and the agricultural sector declines, the wool growing industry becomes smaller and smaller. An attempt to arrest this natural development has, of course, been made through the various governmental efforts to subsidize the wool industry. To the extent to which government supports have raised wool prices--and the relative profitability of wool growing--wool growing has persisted where it otherwise would have disappeared. But

it is obvious that either sheepmen will have to turn to other, more economic enterprises, or government supports will have to become larger and larger as wool growing becomes more and more uneconomic.

The incentives offered under the Wool Act will no doubt serve to keep the present industry going and, depending on the prosperity of the economy as a whole, may tend to prevent a further decline in production. They surely cannot encourage the substantial increases in production envisaged in the Act.

Among those who might agree with this analysis of domestic wool's current plight, there are many who would argue that wool is,nonetheless, essential in time of war. Domestic wool's war record has been previously described. During World War II, production annually declined. Production of pulled and shorn wool was 426 million pounds in 1939 and only 342 million pounds in 1946.[5] At the same time, military and civilian consumption increased from 674 million pounds in 1939 to 1055 million pounds in 1946.[6] In 1946, domestic production was a rough third of consumption requirements.

It should also be noted that domestic production was substantially below military consumption during most of the

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[5]Appendix Table 11.

[6]Domestic Wool Requirements and Sources of Supply, p. 67.

war years. In 1945, for example, military consumption was 575 million pounds, domestic production, shorn and pulled, was 378 pounds.[7]

Finally, despite a large demand and despite the requirement that domestic wools be used in preference to foreign wools, whenever possible, in mills under government contract, it was in 1943 that CCC wool stocks began to accumulate, although military demand remained high. December inventories of the Commodity Credit Corporation increased from 170 million pounds in 1943 to 461 million pounds in 1945 while military consumption was 724 million pounds in 1943 and 575 million pounds in 1946.

If military needs are truly vital, despite the new synthetics, measures other than increased government prices supports might be adopted. For instance, a rotating stockpile could be held in the United States to provide the anticipated margin above domestic production.

The tariff on raw wool and the specific compensatory tariff on wool manufactures are financing the new program. Under the terms of the Act, 70 percent of the accumulated totals of the gross receipts collected after 1 January 1953, on articles subject to a specific duty under schedule 11 of the Tariff Act, are being used to reimburse Commodity Credit payments to producers and to pay for administrative expenses.

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[7]Appendix Table 11, and Domestic Wool Requirements and Sources of Supply, p. 67.

Since tariff revenues pay for the wool subsidy, it may not be out of order to review briefly who benefits from, and who pays for, the wool tariff. Sixteen and six-tenths percent of the population is engaged in agriculture. Six percent of all farms raise sheep. A generous estimate of those among sheep growers whose income is largely or entirely derived from wool would be 4 percent of all sheep growers. Thus 4 percent of the 6 percent of the 16.6 percent of the population--or about .04 percent of the total population--benefit from the tariff.

Most of the population, on the other hand, are wool consumers. Information on the cost of the tariff at the present time, is not available. A study made in 1948[8] assumes that, from 1930 to the beginning of World War II, foreign duty-paid prices were raised by the amount of the duty, i.e., by 34 cents, and domestic prices were raised an average 25 cents a pound above world prices. Thus, according to this study, between 1930 and 1940, the raw wool tariff bill (the quantity of imported wool times the duty per pound) amounted to approximately $180,000,000. During the same period, the American public paid about $500,000,000 above free world prices to the domestic grower. From 1940 to 1946, when the quantities imported were large, the tariff tax on foreign wools amounted to $822,000,000. The value of domestic production, during

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[8]Donald M. Blinken, Wool Tariffs and American Policy, p. 48.

this period, is estimated at $1,100,000,000. Thus, between 1940 and 1946, the total duty bill on raw wool came to 72 percent of the total value of domestic production. At the present time, the duty is only 25.5 cents a pound, and the differential between foreign duty-paid prices and domestic prices is probably greater than in the past. It was previously argued that one cannot assume that wool prices are raised by the full amount of the duty and, moreover, that it is impossible to calculate the price impact of the tariff except for brief periods. (See page 60.) The above figures may provide a somewhat exaggerated picture of the cost of the tariff but they are, unfortunately, the only recent figures available. If one were to assume that they should be reduced by, say, a quarter or a third, they would still be impressive.

But American wool policies are not exclusively a matter of domestic concern. The United States is anxious to establish and preserve friendly relations with foreign countries. It can do so only on a sound economic footing. The economic prosperity of many foreign countries depends on the sale abroad of one or two basic crops. This is especially true of the less industrialized nations. As an example, let us take a quick look at the Australian economy.

"An American discussion of restrictions on wool imports is front-page news in Australia, although it is barely known

beyond wool circles in the United States."[9] About 90 percent of Australian wool production is exported[10] and wool contributes between 35 and 40 percent of Australia's foreign currency earnings.[11] Revenue from the sale of wool pays for manufactured imports. But Australia can buy only when and where she sells. If wool imports to the United States are restricted, sales of American manufactured products to Australia are restricted by the same amount. Since American prosperity depends, in the main, on continued industrial expansion and, therefore, in part, on the sale of manufactured articles abroad, would it not be wise to sacrifice the relatively small wool industry to the national interest?

It is easier to prescribe the remedy than to experience it. Karl Brandt in his book The Reconstruction of World Agriculture proposes that an indemnity be paid to industries which would experience hardship if tariff barriers were lowered. A slightly modified Brandt plan might profitably be applied in the case of wool. Brandt proposes that the tariff be gradually reduced by a specified amount each year, according to a plan made public in advance, until the tariff had been abolished altogether. Enterprises affected would be given time to make the necessary adjustments. For industries unable to make adjustments, Brandt recommends,

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[9] Staff Papers of the Commission on Foreign Economic Policy, (Randall Commission), p. 250.

[10] James P. Belshaw, "Crisis in Farm Production in Australia," Journal of Farm Economics, XXXIV (November 1952), 498.

[11] Concerning Wool, p. 15.

> . . . a federal indemnity to be paid out of the Treasury to companies or individuals who can prove that they suffered from the tariff change a substantial loss in income and that they had no opportunity to avoid such loss during the period of gradual tariff reduction, either by adjusting their enterprise or by shifting into another activity. The burden of proof must rest with the claimants to such indemnity. The Congress ought to be bound to adjudicate the aggregate of all such claims in one procedure so as to avoid piecemeal treatment and cumulative lobby pressures.[12]

The wool tariff should be gradually decreased, as proposed above. In addition, tariff revenues now being and to be collected during the proposed transition period might best be invested in helping growers to establish economic enterprises. Such a program would at least be self-liquidating. In the words of a Fortune article, in which the 1947 Commodity Credit Purchase Program was discussed, "Instead of supporting a losing proposition, as it is doing now, the government--and the taxpayer--might be better off using the Purchase Plan's funds to help the wool growers make the change that they must, in the long run, make anyway."[13]

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[12]Karl Brandt, The Reconstruction of World Agriculture, p. 295.

[13]"The Trouble with U. S. Wool," Fortune, XXXV (January 1947), 93.

CHAPTER VII

SUMMARY

The forces which determine the supply of and the demand for domestic wool were discussed in chapters II and III.

Only a small part of the total agricultural output of the United States can be attributed to sheep. In 1950, 6 percent of all farms reported sheep. Sheep and wool are of varying regional importance but every state raises at least some sheep. Wool-growing is an important industry in the Western states and Texas. Most sheep farmers are small producers. Their income is derived principally from non-sheep enterprises and most of their sheep income is derived from meat, rather than wool. Domestic wool is often of inferior quality, mainly because sheep are bred for meat in preference to wool, and because production is generally small-scale.

There are three stages in the evolution of a sheep industry. The prime requisite of a successful wool-growing enterprise is large tracts of cheap land. Thus, in regions of abundant land, with a low population density, sheep are raised for wool. The return per sheep for wool alone is less than it would be for meat and wool. Flocks are large. In stage two, as population increases or population centers move closer to sheep areas, the sheep industry gradually

turns away from wool, to meat. The wool clip becomes a by-product, with meat the main source of income. Flocks become smaller. Finally, in stage three, as population becomes still more dense, sheep are pushed out altogether and are replaced by more intensive forms of agriculture and by industries and towns. Sheep raising does not lend itself to mechanization. Sheep do not survive, in an industrial economy, not only because of the scarcity of land, but also because of the increased labor required for smaller flocks and the increased cost of such labor. Although the present American economy largely belongs to stage three and the sheep industry itself is generally in stage two, some, perhaps imperfect, examples of stage one still exist.

Since land and labor costs are the determining factors, wool growing tends to be most profitable when the economy as a whole is depressed, and vice versa. Wool production tends to increase when wool prices are low, but land and labor costs are also low, and to decrease when prices are high.

The amount of wool consumed, on the other hand, depends on the level of personal incomes. Wool consumption is much larger during high-price periods than during low-price periods. Domestic production and consumption thus tend to fluctuate in inverse relationship to one another. Imports fill the gap between consumption and production.

Chapters IV, V and VI deal with governmental wool policies. Wool has enjoyed the protection of a high tariff

during most of the last 150 years. The tariff varied, but generally moved upward, until the 1940's when it was slightly reduced. Short term fluctuations in the tariff can be attributed to fluctuations in the business cycle. Tariff rates increase during periods of falling prices and decrease during high-price periods. The cyclical role of the wool tariff is further enhanced by its specificness since a specific tariff is equivalent to higher ad valorem rates when prices are low than when they are high.

As America has become more and more of an industrial nation, domestic production has tended to decline. The excess of consumption over production has been met by large imports. The wool tariff has therefore become extremely effective in raising prices. The domestic industry would undoubtedly have been smaller than it is, had there been no tariff. Developments during and since World War II, on the other hand, have made the tariff less effective in protecting the domestic market for domestic producers. New methods of manufacturing which require a highly uniform fiber have led manufacturers to use more expensive, but more uniform, foreign wools in preference to the domestic product. Since World War II, the invention of wool-like synthetics has also helped curtail the domestic wool market.

In 1943, when outlets for domestic wool were becoming scarce, the Commodity Credit Corporation instituted a compulsory purchase program. But, by that time, American wools

were at such a comparative disadvantage that the CCC was faced with accumulating stocks and few buyers. Government wool stocks reached a peak of 546 million pounds in 1946.

Essentially, the Wool Act of 1954 proposes to solve the dual problem of finding outlets for domestic wool and of increasing domestic production, on the premise that wool is essential in time of war. Under the Act, growers are paid a direct subsidy by the government. Direct payments, of course, solve the problem of stocks accumulating on government account, since wool is privately marketed. Direct payments also allow market prices to fall to competitive levels. Since, as previously mentioned, the American economy is largely unsuited to the production of wool, particularly the production of the best and finest wools, and since the incentives offered under the Wool Act are not very different from prices received in recent years, it is extremely doubtful that the Wool Act will stimulate a substantial increase in production.

APPENDICES

APPENDIX A

TABLE 1

SHEEP AND LAMBS IN THE UNITED STATES 1840-1954

Year	Number of Sheep and Lambs
1840	19,311,374
1850	21,723,220
1860	22,471,275
1870	28,477,951
1880	42,192,074
1890	40,564,641
1900	61,503,713
1910	52,447,861
1920	35,033,516
1925	35,590,159
1930	56,975,084
1935	48,357,506
1940	40,129,261
1945	41,223,869
1950	31,386,801
1954	31,618,909[1]

[1] Not enumerated in Florida, Georgia and South Carolina.

Source: "Livestock and Livestock Products," United States Census of Agriculture: 1954, II, 434-35.

TABLE 2

UNITED STATES SHEEP AND WOOL PRODUCTION
1949

Number of Sheep Shorn per Farm	Farms Reporting Sheep Shorn			Wool Production		
	Number	Percent	Cumulative Percent	Pounds	Percent	Cumulative Percent
Under 25	170,912	59.86		15,142,592	8.47	
25-49	60,022	21.02	80.88	15,113,800	8.47	
50-99	28,420	9.95	90.83	14,317,590	8.01	
100-299	15,769	5.52	96.35	19,245,535	10.77	
300-599	4,277	1.50	97.85	12,993,854	7.27	
600-999	2,004	.70	98.55	11,880,431	16.65	
1000-2499	2,790	.98	99.53 } 1.44	35,182,168	19,68 }	50.38
2500 and over	1,340	.46		54,876,594	30.70	
TOTAL	285,534			178,752,564		

Derived from "Livestock and Livestock Products," United States Census of Agriculture: 1950, II, 434.

TABLE 3

SIZE OF FLOCKS, BY STATES
1949

State	Number of Farms Reporting			
	Less than 49 Sheep Shorn	300 and Over	1000 and Over	Total Number of Farms
New England				
Maine	1,159	--	--	1,207
New Hampshire	360	--	--	376
Vermont	456	--	--	490
Massachusetts	496	1	--	512
Rhode Island	102	--	--	104
Connecticut	408	--	--	422
Middle Atlantic				
New York	2,964	15	--	3,548
New Jersey	402	1	--	422
Pennsylvania	5,671	25	--	6,577
East North Central				
Ohio	25,552	118	7	29,601
Indiana	16,020	36	6	16,760
Illinois	18,118	35	9	18,967
Michigan	6,961	36	1	8,568
Wisconsin	8,222	6	4	8,826
West North Central				
Minnesota	15,615	52	9	17,791
Iowa	19,590	171	15	22,327
Missouri	22,383	134	14	25,461
North Dakota	4,102	87	10	
South Dakota	6,522	426	112	8,987
Nebraska	2,065	99	24	2,705
Kansas	5,941	87	20	7,197
South Atlantic				
Delaware	54	--	--	64
Maryland	1,203	1	--	1,291
Virginia	7,356	23	--	8,406
West Virginia	8,879	6	--	9,796
North Carolina	1,776	1	--	1,821
South Carolina	118	--	--	125
Georgia	273	--	--	293
Florida	61	2	--	76

TABLE 3 (continued)

States	Number of Farms Reporting			
	Less than 49 Sheep Shorn	300 and Over	1000 and Over	Total Number of Farms
East South Central				
Kentucky	10,605	56	--	13,659
Tennessee	6,349	9	--	7,265
Alabama	366	3	--	437
Mississippi	713	20	--	892
West North Central				
Arkansas	1,175	2	--	1,273
Louisiana	1,393	45	15	1,543
Oklahoma	2,116	24	--	2,590
Texas	8,473	3,634	1,327	18,638
Montana	1,352	748	375	3,001
Idaho	2,108	395	233	3,310
Wyoming	915	695	406	2,452
Colorado	1,539	808	308	3,662
New Mexico	1,206	578	231	2,530
Arizona	130	41	33	205
Utah	2,024	510	314	2,986
Nevada	313	71	62	460
Washington	1,284	74	58	1,602
Oregon	3,286	303	109	5,268
California	2,698	1,033	425	5,068

Derived from "Livestock and Livestock Products," United States Census of Agriculture, 1950, II, 434-440.

TABLE 4

OFFICIAL UNITED STATES STANDARDS FOR GRADES OF WOOL

Blood System	Count System
Fine	80s, 70s, 64s
Half-blood	60s, 58s
Three-eighths-blood	56s
Quarter-blood	50s, 48s
Low-quarter-blood	46s
Common	44s
Braid	40s, 36s

Source: D. W. Carr and L. D. Howell, Economics of Preparing Wool for Market and Manufacture, p. 21.

TABLE 5

THE PRODUCTION AND CONSUMPTION OF WOOL
1924 - 1956

Year	Average Price Received by Growers per Grease Pound		Shorn Wool Production	Apparel Wool Consumption	Price per Clean Pound of Fine Wool[a]
	As a percentage of the July parity price	Annual Average	Millions of grease pounds	Millions of scoured pounds	
	Percent	Cents			Cents
1924	113	36.6	238	250	141.2
25	127	39.5	253	252	139.0
26	104	34.0	269	255	116.2
27	101	30.3	289	259	110.3
28	122	36.2	315	232	116.1
29	97	30.2	328	253	96.1
30	66	19.5	352	201	76.2
31	50	13.6	376	238	63.1
32	31	8.6	351	188	47.0
33	103	20.6	374	246	67.0
34	92	21.9	369	168	81.6
35	87	19.3	362	319	74.8
36	119	26.9	353	300	92.0
37	128	32.0	356	274	101.9
38	82	19.1	360	220	70.4
39	98	22.3	362	293	82.7
40	122	28.4	372	310	96.3
41	152	35.5	388	514	108.3
42	145	40.1	388	560	119.1
43	140	41.6	379	603	117.8
44	139	42.3	338	577	119.0
45	135	41.9	308	589	117.7
46	119	42.3	281	610	102.6
47	99	42.0	251	526	124.2
48	110	49.2	232	485	164.6
49	109	49.4	213	339	166.4
50	113	62.1	217	437	199.2
51	157	77.1	228	382	270.5
52	89	54.1	233	347	165.3
53	94	54.9	232	358	173.0
54	93	53.2	236	266	170.6
55	76	42.8	233	286	142.1
56	67	--	232	--	137.1

[a]The prices listed are for Territory work, fine combing, 64's and finer, clean, at Boston.

Sources: Wool Statistics and Related Data, pp. 5, 58, 79, 80, 81, and 83, and Cumulative Supplement for 1945-56 to Wool Statistics and Related Data, pp. 3, 32, 55, and 56.

TABLE 6

PERCENTAGE DISTRIBUTION OF PRINCIPAL REASONS REPORTED BY SHEEP GROWERS FOR THEIR REDUCTIONS IN NUMBERS OF SHEEP BETWEEN 1943 AND 1948

Reasons Reported[1]	Percentage Distribution					
	Native Sheep States			Range States		Total
	E.N. Cent.[2]	W.N. Cent.[3]	Other[4]	Texas	West States[5]	29 States
Reduction in acreage of farm or ranch	3.2	3.6	4.4	4.9	3.1	3.6
Reduction in grazing allotments on national forests, grazing districts or elsewhere	0.1	0.5	0.4	---	6.0	1.7
*Reduction in pasture area due to increased crop acreage[6]	6.8	4.3	2.4	0.7	2.9	4.1
Poor condition of pasture or ranges which reduced feed supplies	3.4	4.2	4.5	32.0	5.6	5.9
Unusual losses from such causes as dogs, wild animals, diseases, etc.	16.7	17.0	25.1	9.5	8.7	16.3
Too much farm and had to cut down on something	12.6	17.6	9.5	3.7	5.1	11.3
Scarcity of all hired help and high wages	5.9	10.7	10.3	10.8	15.3	10.4
Available help not qualified or dependable	3.4	5.6	6.4	3.7	14.4	7.1
*High cost of operations in relation to prices of sheep, lambs, and wool	7.1	3.4	5.2	5.9	10.2	6.4
*Low returns from sheep operations compared with						
(a) Returns from other livestock	19.2	7.7	2.3	7.8	6.3	11.2
(b) Returns from cash crops	3.3	2.1	1.0	0.7	2.1	2.2
Fear of a drop in wool prices	1.4	0.7	0.9	1.5	0.8	1.0

TABLE 6 (continued)

Reasons Reported[1]	Percentage Distribution: Native Sheep States: E.N. Cent.[2]	Native Sheep States: W.N. Cent.[3]	Native Sheep States: Other[4]	Range States: Texas	Range States: West States	Total 29 States
Possibility of a drop in lamb prices	0.5	1.0	0.7	0.7	0.8	0.8
Prices of sheep and lambs seemed high and looked like a good time to cut down or sell out	4.1	5.3	4.6	6.4	3.5	4.5
Operator of advanced age, in poor health, or died	1.2	3.7	2.0	2.9	5.6	3.2
Farm or ranch sold or leased, or operator moved to another farm	2.8	3.5	3.9	2.4	4.7	3.6
*Increase in other livestock (cattle, dairying, hogs); sheep do not fit in	0.8	2.8	0.7	0.2	0.5	1.2
Inadequate fences and high cost or scarcity of fencing materials	2.2	1.0	1.5	0.2	0.1	1.1
All other reasons	3.3	5.3	4.2	6.0	4.3	4.4

[1]Answers are not weighted according to the size of the enterprise. "Number of times reported" does not show relative importance or the effect on total sheep numbers since this would depend on relative size.

[2]Ohio, Indiana, Illinois, Michigan, Wisconsin.

[3]Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas.

[4]Pennsylvania, Virginia, Kentucky, Tennessee, Oklahoma.

[5]Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California.

[6]Headings preceded by an asterisk were grouped together and their total is the one shown in the text, under the general heading "low returns from sheep compared to alternative enterprises." (See p. 25) Perhaps the heading "too much farming and had to cut down on something" should also have been added to this group.

Source: C. J. Borum and E. H. Carter, Causes of Decline in Michigan Sheep Numbers.

TABLE 7

PER CAPITA CONSUMPTION OF WOOL, TOGETHER WITH A COMPARISON OF THE PRICES OF WOOL AND SYNTHETIC FIBERS

1930 - 1956

Year	Per Capita Consumption of Apparel Wool (scoured basis)		Price per Pound		
			Wool, territory, fine good French combing and staple	Rayon staple fiber, viscose 1 1/2 denier	Acetate staple fiber, 5 denier
	Pounds		Cents	Cents	Cents
1930	1.63		76.2	60.0	
31	1.92		63.1	57.6	
32	1.51		47.0	45.8	
33	1.95		67.0	40.0	
34	1.33		81.6	34.6	
35	2.51		74.8	34.0	
36	2.34		92.0	30.4	66.3
37	2.13		101.9	27.1	52.2
38	1.69		70.4	25.0	46.5
39	2.24		82.7	25.0	46.0
40	2.35	2.0[a]	96.3	25.0	43.0
41	3.86	2.0[a]	108.8	25.0	43.0
42	4.15	1.0[a]	119.1	25.0	43.0
43	4.41	1.6[a]	117.8	24.4	43.0
44	4.17	2.5[a]	119.0	24.8	41.9
45	4.21	2.1[a]	117.7	25.0	38.0
46	4.31		102.6	25.4	39.1
47	3.65		124.2	32.0	47.8
48	3.31		164.6	36.4	48.0
49	2.27		166.4	35.8	42.9
50	2.08		199.2	36.1	42.5
51	2.47		270.5	40.0	48.0
52	2.21		165.3	39.5	42.4
53	2.24		173.0	35.0	35.6
54	1.64		170.6	34.0	34.0
55	1.73		142.1	33.7	35.7
56	--		137.1	32.0[b]	32.0[b]

[a]Estimated civilian.

[b]Not including prices for December.

TABLE 7 (continued)

Year	Price per Pound of					
	Nylon Staple and Tow	Vicara Staple Fiber	Orlon Acrylic Staple Fiber	Dacron Polyester Staple and Tow	Acrilan Staple Fiber	Dynel Staple Fiber
	Cents	Cents	Cents	Cents	Cents	Cents
1949	---	86.5	---	---	---	---
1950	---	83.2	---	---	---	125.0
51	---	99.3	---	---	---	125.0
52	---	100.0	190.0	---	---	127.3
53	180.0	100.0	190.0	180.0	165.0	128.0
54	155.2	100.0	152.5	161.7	140.0	128.0
55	150.8	100.0	147.9	157.9	135.3	124.2

Sources: Wool Statistics and Related Data, pp. 83 and 129, and Cumulative Supplement for 1945-56 to Wool Statistics and Related Data, pp. 32, 56, 93, 94, and 95.

TABLE 8

A COMPARISON OF AMERICAN AND AUSTRALIAN WOOLS

Percentage Distribution by Sort

Sort	American[1]			Australian Warp[4]
	Warp[2]	Filling[3]	Total	
Loss			5.00	2.80
80s	1.40	0.87	2.27	.22
70s	17.56	5.52	23.08	21.42
64s	41.02	20.68	61.70	65.02
60s	2.76	--	2.76	10.15
58s	.13		.13	.07
40s	.03		.03	
64s burry			1.10	.30
Black			.09	
Felted			.03	
Paint			.08	.02
Stained			3.29	.005
Strings			.56	

[1]Original 12 months Texas wool, 40,000 pounds.

[2]Length over 1½ inches (i.e., of combing length, suitable for worsted manufacture).

[3]Length less than 1½ inches.

[4]Includes 30,000 pounds of 64s combing, all more than 1½ inches in length.

Source: D. W. Carr and L. D. Howell, Economics of Preparing Wool for Market and Manufacture, p. 42.

TABLE 9

AVERAGE PRICE PER CLEAN POUND AND PRICE DIFFERENTIALS OF AUSTRALIAN AND TERRITORY FINE WOOLS AT BOSTON

1930 - 1956

Year	Australian, 64s-70s, Good Top-making, Ex-duty	Duty	Australian, 64s-70s, Good Top-making, Duty-paid	Territory, Fine Good French Combing and Staple (64s and fine)	Territory as a Percentage of Duty-paid Australian
	Cents	Cents	Cents	Cents	Percent
1930	56.0	31.5	88.7	76.2	86
31	46.0	34.0	80.6	63.1	78
32	30.0		64.7	47.0	73
33	45.9		79.9	67.0	84
34	61.9		95.9	81.6	85
35	52.6		86.6	74.8	86
36	65.2		100.2	92.0	92
37	71.9		105.9	101.9	96
38	50.4		84.4	70.4	83
39	52.4		86.4	82.7	96
40	61.4		95.4	96.3	101
41	69.5		103.5	108.8	105
42	75.4		109.4	119.1	109
43	75.9		109.9	117.8	107
44	72.1		106.1	119.0	112
45	75.2		109.2	117.7	108
46	76.1		110.1	102.6	93
47	102.9		136.9	124.2	91
48	159.9	25.5	185.4	164.6	89
49	170.3		195.8	166.4	85
50	198.7		224.2	199.2	89
51	259.1		284.6	270.5	95
52	150.0		175.5	165.3	94
53	176.7		202.2	173.0	86
54	172.1		197.6	170.6	86
55	139.6		165.1	142.1	86
56	138.6		164.1	137.1	84

Sources: D. W. Carr and L. D. Howell, Economics of Preparing Wool for Market and Manufacture, p. 45, Albert M. Hermie, Prices of Apparel Wool, p. 35, and Cumulative Supplement to Wool Statistics and Related Data, pp. 56 and 64.

TABLE 10

MILL CONSUMPTION OF DOMESTIC AND FOREIGN APPAREL WOOL
(scoured basis)

1930 - 1952

Year	Total	Domestic	Foreign	Percentage of Total	
				Domestic	Foreign
	million pounds	million pounds	million pounds	percent	percent
1930	200.7	149.9	50.8	74.7	25.3
31	237.7	203.9	33.8	85.8	14.2
32	188.5	175.4	13.1	93.1	6.9
33	245.5	224.6	20.9	91.5	8.5
34	167.6	145.0	22.6	86.5	13.5
35	319.0	293.5	25.5	92.0	8.0
36	299.8	229.1	70.7	76.4	23.6
37	274.2	174.8	99.4	63.7	36.3
38	219.6	194.2	25.4	88.4	11.6
39	293.1	242.0	51.1	82.6	17.4
40	310.0	215.1	94.9	69.4	30.6
41	515.7	223.1	292.6	43.3	56.7
42	571.4	244.5	326.9	42.8	57.2
43	591.9	203.6	388.3	34.4	65.6
44	577.0	150.9	426.1	26.2	73.8
45	589.2	120.4	468.8	20.4	79.6
46	609.6	106.9	502.7	17.5	82.5
47	525.9	161.2	364.7	30.7	69.3
48	485.2	239.0	246.2	49.3	50.7
49	339.0	184.1	154.9	54.3	45.7
50	436.9	186.8	250.1	42.8	57.2
51	382.1	110.1	272.0	28.8	71.2
52	346.8	98.4	248.5	28.4	71.6

Source: D. W. Carr and L. D. Howell, Economics of Preparing Wool for Market and Manufacture, p. 38.

TABLE 11

CCC ACQUISITIONS AND LEVELS OF SUPPORT
1938 - 1955

Year	Production Shorn and Pulled	Acquist. Shorn and Pulled	Sales Shorn and Pulled	Inventory as of Dec.			Level of Support		Marketing Season Average Price
				Total	Grease	Scoured	Percent of Parity	Average Support Level Cents per lb.	
1938	424.4	83.1					75	18.0	19.1
39	426.2	10.9					78	18.0	22.3
'40-42	---------- No support program ----------								
43	444.0	225.1	55.5	169.6	161.8	7.8	141	41.7	41.6
44	411.8	381.6	227.1	324.1	304.1	20.0	135	42.4	42.3
45	378.5	346.2	206.9	461.0	435.2	25.8	132	41.9	41.9
46	342.2	319.9	320.3	444.2	414.6	29.6	129	42.3	42.3
47	308.0	220.5	285.8	302.9	258.0	44.9	101	42.3	42.0
48	278.4	80.7	288.2	108.2	64.9	43.3	94	42.3	49.2
49	248.5	72.0	124.9	61.1	34.6	26.5	94	42.3	49.4
50	247.8	7.5	76.3	0.1			90	45.2	62.1
51	251.4						90	50.7	97.0
52	266.0	0.1		0.1		0.1	90	54.2	53.3
53	271.3	100.6	3.6	96.8	93.4	3.4	90	53.1	54.9
54	235.8	36.4	14.0	110.9	104.1	6.8	90		53.2
55	233.4	45.1	16.8	140.1	135.4	4.7	106		42.8

Derived from Wool Statistics and Related Data, pp. 5, 56, and 79, and Cumulative Supplement for 1945-56 to Wool Statistics and Related Data, pp. 3, 30, and 55.

APPENDIX B

NATIONAL WOOL ACT OF 1954

Sec. 701. This title may be cited as the "National Wool Act of 1954."

Sec. 702. It is hereby recognized that wool is an essential and strategic commodity which is not produced in quantities and grades in the United States to meet the domestic needs and that the desired domestic production of wool is impaired by the depressing effects of wide fluctuations in the price of wool in the world markets. It is hereby declared to be the policy of Congress, as a measure of national security and in promotion of the general economic welfare, to encourage the annual domestic production of approximately three hundred million pounds of shorn wool, grease basis, at prices fair to both producers and consumers in a manner which will have the least adverse effects upon foreign trade.

Sec. 703. The Secretary of Agriculture shall, through the Commodity Credit Corporation, support the prices of wool and mohair, respectively, to the producers thereof by means of loans, purchases, payments, or other operations. Such price support shall be limited to wool and mohair marketed during the period beginning April 1, 1955, and ending March 31, 1959. The support price for shorn wool shall be at such incentive level as the Secretary, after consultation with producer representatives, and after taking into consideration prices paid and other cost conditions affecting sheep production, determines to be necessary in order to encourage an annual production consistent with the declared policy of this title: Provided, That the support price for shorn wool shall not exceed 110 per centum of the parity price therefor. If the support price so determined does not exceed 90 per centum of the parity price for shorn wool, the support price for shorn wool shall be at such level, not in excess of 90 per centum nor less than 60 per centum of the parity price therefor, as the Secretary determines necessary in order to encourage an annual production of approximately three hundred and sixty million pounds of shorn wool. The support prices for pulled wool and for mohair shall be established at such levels, in relationship to the support price for shorn wool, as the Secretary determines will maintain normal marketing practices for pulled wool, and as the Secretary shall determine is necessary to maintain approximately the same percentage of parity for mohair as for shorn wool. The deviation of mohair support prices shall not be calculated so as to cause it to rise or fall more than 15 per centum above or below the comparable percentage of parity at which shorn wool is supported. Notwithstanding the foregoing, no price support shall be made available, other than through payments, at a level in excess of 90 per centum of the parity price for the commodity. The Secretary shall, to the extent practicable, announce the support price levels for wool and

mohair sufficiently in advance of each marketing year as will permit producers to plan their production for such marketing year.

Sec. 704. If payments are utilized as a means of price support, the payments shall be such as the Secretary of Agriculture determines to be sufficient, when added to the national average price received by producers, to give producers a national average return for the commodity equal to the support price level therefor: Provided, That the total of all such payments made under this Act shall not at any time exceed an amount equal to 70 per centum of the accumulated totals, as of the same date, of the gross receipts from specific duties (whether or not such specific duties are parts of compound rates) collected on and after January 1, 1953, on all articles subject to duty under schedule 11 of the Tariff Act of 1930, as amended. The payments shall be made upon wool and mohair marketed by the producers thereof, but any wool or mohair produced prior to January 1, 1955, shall not be the subject of payments. The payments shall be at such rates for the marketing year or periods thereof as the Secretary determines will give producers the support price level as herein provided. Payments to any producer need not be made if the Secretary determines that the amount of the payment to the producer or all producers is too small to justify the cost of making such payments. The Secretary may make the payment to producers through the marketing agency to or through whom the producer marketed his wool or mohair: Provided, That such marketing agency agrees to receive and promptly distribute the payments on behalf of such producers. In case any person who is entitled to any such payment dies, becomes incompetent, or disappears before receiving such payment, or is succeeded by another who renders or completes the required performance, the payment shall, without regard to any other provisions of law, be made as the Secretary may determine to be fair and reasonable in all the circumstances and provided by regulation.

Sec. 705. For the purpose of reimbursing the Commodity Credit Corporation for any expenditures made by it in connection with payments to producers under this title, there is hereby appropriated for each fiscal year beginning with the fiscal year ending June 30, 1956, an amount equal to the total of expenditures made by the Corporation during the preceding fiscal year and to any amounts expended in prior fiscal years not previously reimbursed: Provided, however, that such amounts appropriated for any fiscal year shall not exceed 70 per centum of the gross receipts from specific duties (whether or not such specific duties are parts of compound rates) collected during the period January 1 to December 31, both inclusive, preceding the beginning of each such fiscal year on all articles subject to duty under schedule 11 of the Tariff Act of 1930,

as amended. For the purposes of the appraisal under the Act of March 8, 1938, as amended (15 U. S. C. 713a-1), the Commodity Credit Corporation shall establish on its books an account receivable in an amount equal to any amount expended by Commodity Credit Corporation in connection with payments pursuant to this title which has not been reimbursed from appropriateions made hereunder.

Sec. 706. Except as otherwise provided in this title, the amounts, terms and conditions of the price support operations and the extent to which such operations are carried out shall be determined or approved by the Secretary of Agriculture. The Secretary may, in determining support prices and rates of payment, make adjustments in such prices or rates for differences in grade, quality, type, location, and other factors to the extent he deems practicable and desirable. Determinations by the Secretary under this title shall be final and conclusive. The facts constituting the basis for any operation, payment, or amount thereof when officially determined in conformity with applicable regulations prescribed by the Secretary shall be final and conclusive and shall not be reviewable by any other officer or agency of the Government.

Sec. 707. The term "marketing year" as used in this title means the twelve-month period beginning April 1 of each calendar year or, for either wool or mohair, such other period, or periods for prescribed areas, as the Secretary may determine to be desirable to effectuate the purpose of this title.

Sec. 708. The Secretary of Agriculture is authorized to enter into agreements with, or to approve agreements entered into between, marketing cooperatives, trade associations, or others engaged or whose members are engaged in the handling of wool, mohair, sheep, or goats or the products thereof for the purpose of developing and conducting on a National State, or regional basis advertising and sales promotion programs for wool, mohair, sheep, or goats or the products thereof. Provision may be made in such agreement to obtain the funds necessary to defray the expenses incurred thereunder through pro rata deductions from the payments made under section 704 of this title to producers within the production area he determines will be benefited by the agreement and for the assignment and transfer of the amounts so deducted to the person or agency designated in the agreement to receive such amounts for expenditure in accordance with the terms and conditions of the agreement. No agreement containing such a provision for defraying expenses through deductions shall become effective until the Secretary determines that at least two-thirds of the producers who, during a representative period determined by the Secretary, have been engaged, within the production area he determines will be benefited by the agreement, in the production

for market of the commodity specified therein approve or favor such agreement or that producers who, during such representative period have produced at least two-thirds of the volums of such commodity produced within the area which will be benefited by such agreement, approve or favor such agreement. Approval or disapproval by cooperative associations shall be considered as approval or disapproval by the producers who are members of, stockholders in, or under contract with such cooperative association of producers. The Secretary may conduct a referendum among producers to ascertain their approval or favor. The requirements of approval or favor shall be held to be complied with if two-thirds of the total number of producers, or two-thirds of the total volume of production, as the case may be, represented in such referendum, indicate their approval or favor.

Sec. 709. Section 201 of the Agricultural Act of 1949 (7 U. S. C., sec. 1446) is amended effective April 1, 1955, (i) by deleting from the first sentence thereof the phrase "wool (including mohair," and (ii) by deleting sub section (a) thereof relating to the support of wool and mohair.

Sec. 710. (a) The third sentence of section 2 (a) of the Commodity Exchange Act, as amended, is amended by inserting "wool," after the comma following "(Irish potatoes)".

(b) The amendment made by this section shall become effective sixty days after the date of enactment of this Act.

Source: United States Statutes at Large, LXVIII, 910-13.

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