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Economics of Wool Marketing in Utah

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ECONOMICS OF WOOL MARKETING IN UTAH

by

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INTRODUCTION

Since the beginning of history the wool of sheep has been used by the human race. Its chief use has been and still is for clothing. Also, it is widely used for blankets, upholstery, carpets, and numerous other products.

The wool industry is important to the state of Utah, which was the sixth largest producing state in the United States in 1958. Wool growers in Utah received approximately $7,897,000 in sales proceeds and government payments for wool sold during the 1958 marketing year (12).[1]

History of the Sheep and Wool Industry in Utah

The sheep industry in Utah was begun mainly by the early Mormon population. Pioneer companies which reached the Great Salt Lake Valley in 1847 had a total of 358 sheep. There were a dozen sheep of record when they arrived, the property of Miles Goodyear who operated a trading post near what is now Ogden. About 5,500 sheep of eastern origin were in Utah by 1851. In 1853 Elisha Van Etten introduced 266 Spanish Merino rams which dominated the bloodlines of the state until the French Merinos began in appear about 1860 (14, p. 225).

The establishment of several woolen mills in Utah about 1870 created a demand for finer wool. Powers (9, p. 274) states:

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[1] A wool marketing year is from April 1 to March 31.

> Henry Bell traded to Brigham Young, for fat wethers, five thousand graded Merinos from California. Still, up to 1873 the quality of Utah wool remained poor, being little improved except by a few long-wool rams. In that year Daniel Davidson brought in four hundred high grade Merino rams, an example soon followed by others.

Through stock improvement Davidson raised his herd average to 5.7 pounds of wool per head. This was a big improvement over the 1½ to 2 pounds per head shorn by stock introduced from New Mexico in those days.

Beginning about 1890, breeders in central Utah favored Rambouillets. By 1920, Utah had nearly one-fourth of all purebred Rambouillets in the United States. Rambouillet and Merino breeds have continued to dominate the sheep bloodlines in Utah to the present time.

The number of sheep in Utah has fluctuated considerably since 1890. A peak number of 2,692,000 head of sheep were shorn in 1931. Since then a rather steady decline brought the total to 1,211,000 head shorn in Utah in 1958 (Appendix Table 16).

The average weight per fleece in Utah reached an all time high of 9.9 pounds in 1956 and has averaged about 9.7 pounds over the past five years. Total wool shorn in Utah over the past five years has averaged about 12 million pounds per year; this is roughly one-half as much as was produced during the peak years of 1930-31. The decline in the number of sheep and the amount of wool produced in Utah is comparable to a general decline throughout the United States. Despite this decline, sheep and wool enterprises retain an important position in the economy of Utah. Total income from wool including incentive payments was higher in 1958 than during the period of peak production (12). However, much of this increase was due to price level changes.

The Problem and Its Background

The early settlers of the United States had few if any wool marketing problems. Most families raised enough sheep to produce wool to meet their own needs or traded surplus wool to others in return for various necessities of life. Wool processing was also a home industry.

Early commercial manufacturers were in close contact with wool producers and indicated what wool was wanted. Early price records often show some grades of wool selling for two or three times the price of other grades. This incentive stimulated the production of higher priced grades.

As the country became more settled sheep men moved westward to relatively cheap and abundant feed; the manufacturer remained in the East where power and labor were plentiful. Without personal contact with the manufacturer the wool grower soon lost his knowledge of mill requirements. Mills sent out their representatives but contact was more indirect. Mill buyers did not contact small producers in out-of-the-way sections. This business was gradually taken over by local wool buyers adding another step between the grower and the mills, as well as another marketing cost.

About this time commission houses whose function was to assemble, grade, and sell wool to the mills came into existence. Local buyers purchased small clips outright and sold through commission houses to representatives of mills (13).

Many local buyers lacked the ability to accurately estimate wool values and flat rate prices for all wool of a community became common.

This practice penalized producers of good wool and subsidized producers of poor, heavy, shrinking wools. Many producers began to breed for grease and quality of the wool clip deteriorated.

The system of selling wool as developed in the United States seemed so unfair and detrimental to the best interests of producers that it soon commanded the attention of farm organizations. Some of these organizations recommended the establishment of wool pools. The most famous early wool pool in the West was the Jerico Pool which was organized about 1912 in Fountain Green, Sanpete County, Utah. This cooperative pool gained national recognition when it sold its combined clips for 71 cents per pound shortly before the market break in 1920. This type of marketing organization has been common throughout Utah. Utah wool pools have been formed, disorganized, and reorganized throughout the history of the state (11).

Government influences in wool marketing

In tracing the development of wool marketing, it is essential that the operation of United States government programs be mentioned. Considerable government influence has been felt in the wool industry since the economic disturbances created by World War I and the agricultural depression of the 1920's and 1930's. The purpose of most of these programs has been to help stabilize prices and improve grower income. Since wool has been almost continually on an import basis in the United States producers have favored tariffs to keep prices uniform. However, tariffs have not been as effective as many had hoped. Wool prices have fluctuated widely (Appendix Table 16) under both high and low tariffs.

In an effort to improve wool marketing, the government established cooperative marketing on a national level in 1929 similar to that already developed in some states. The government-sponsored National Wool Marketing Corporation (N.W.M.C.) represents the most impressive effort in cooperative wool marketing to date. Under the Agricultural Marketing Act of 1929 the N.W.M.C. was incorporated with a capital stock of $1,000,000. Many state cooperatives, including the Utah Wool Marketing Association, and large pools have joined the new organization. By the end of 1930 the N.W.M.C. represented approximately 40,000 growers and handled over 100,000,000 pounds of wool annually.

Some early depression losses of the National Wool Marketing Corporation were absorbed by the Federal Farm Board. But, with improved wool prices in the latter part of 1933, the N.W.M.C. was able to strengthen its financial position and has since functioned effectively as a cooperative selling organization.

Cooperative wool marketing has helped establish the practice of selling wool by grades. Cooperatives do not actually purchase wool but act as selling agents for the producer. A large percent of the wool handled by cooperatives is sold on a graded basis (13).

In general, cooperatives have rendered valuable service in educating growers as to wool grades and qualities. The country buyer had no inducement to educate growers. The less growers knew about their wool, the easier it was to buy from them. Cooperative wool marketing has not entirely solved the problem, but it has been a step in improving wool marketing in the United States.

Wool in World War II and postwar years.--Government intervention ceased to be a major factor in the wool market from 1932 until the outbreak of World War II. However, protective tariffs were continued and a modest loan program was made available in 1938 and 1939.

A major step by the government in the domestic wool program came in 1943. The Secretary of Agriculture directed the Commodity Credit Corporation (C.C.C.) to purchase the entire domestic clip at ceiling prices and required that all domestic wool, with minor exceptions, be sold to the C.C.C. This provision was extended year by year until 1947.

The price of wool purchased under the government C.C.C. program was determined on a graded basis rather than a flat rate price for the entire clip. Finer wools normally commanded a higher price which served as an incentive for producers to improve the quality of their wool.

The last of the C.C.C. holdings carried over from World War II were liquidated in the summer of 1950 and no domestic wool was acquired under the 1950 and 1951 support programs. A relatively small amount of wool was acquired by the C.C.C. under the 1952-1954 price support program. This wool has since been liquidated (2).

The National Wool Act of 1954.--Early in 1954 a new plan commonly referred to as the incentive program was proposed as an approach to the wool problem. Under this program the forces of supply and demand would be allowed to establish the market price of wool. Direct payments would be made to growers at the end of the season in an amount sufficient to make up the difference between the national average price received by wool growers and the incentive price specified. This proposal was

established under provisions of the National Wool Act as part of the Agricultural Act of 1954 (4).

The incentive price is determined by the Secretary of Agriculture. He consults producer representatives and considers prices and cost conditions affecting sheep production. He then determines the incentive level necessary to encourage annual domestic production of 300 million pounds of shorn grease wool as set by law.

The incentive level may not exceed 110 percent of parity, and the amount available for payments may not exceed 70 percent of the accumulated totals of specific duties on wool and wool products collected on imports after January 1, 1953.

The National Wool Act of 1954 authorized incentive payments beginning with the 1955 clip and extending to March 31, 1959. The program has since been extended to March 31, 1962, which is the end of the 1961 marketing year. The incentive price has been set at 62 cents per pound each year since the program was adopted. This means government payments make up the difference between the national average price for wool in a marketing year and the 62 cent incentive price.

Government wool grades.--Another governmental influence in wool marketing was the establishment in 1926 of official U.S. wool standards for grades of wool. The grade of wool is determined primarily by fineness and length of fiber. Grades may be designated by the blood system which originated in the United States, or by the count system as developed in England. Table 1 summarizes the relationship of wool grades according to fineness and length. This summary made by the Bureau of Economics

embodies the traditional American blood terms and the more universal count system.

Wool with a spinning count grade of 64 means that a pound of wool will spin 64 hanks of yarn, each hank being 560 yards long. The blood terms simply indicate the fineness of the fibers and have nothing to do with the breed of sheep although originally they referred to the amount of Merino blood in the sheep producing the wool.

Table 1. Official United States Standards for wool grades

Type of wool	Blood grade	Spinning count grade	Length requirements in inches		
			Clothing	French combing	Combing
Fine	Fine	80,70,64	Under $1\frac{1}{4}$	$1\frac{1}{4}$ to 2	Over 2
Medium	Half	60,58	Under $1\frac{1}{4}$	$1\frac{1}{4}$ to $2\frac{1}{4}$	Over $2\frac{1}{4}$
Medium	Three-eighths	56	Under $1\frac{1}{2}$	$1\frac{1}{2}$ to $2\frac{1}{2}$	Over $2\frac{1}{2}$
Coarse	Quarter	50,48	Under $1\frac{1}{2}$	$1\frac{1}{2}$ to 2 3/4	Over 2 3/4
Coarse	Low-quarter	46	Under 2	2 to 3	Over 3
Very coarse	Common	44	--	--	--
Very coarse	Braid	40,36	--	--	--

Source: Levi J. Horlacher and Carsie Hammonds, The Interstate Sheep (Danville, Ill., 1942), p. 278.

Statement of the Problem

The marketing of wool to gain maximum returns is a complex and difficult process. Producers are faced with many alternatives or combinations of alternatives which may influence their returns. Theoretically the price of wool is a function of many variables. However, most of the variation in price may be due to a relatively small number of factors (7).

The price of wool in the United States is greatly dependent on the health and vigor of international wool markets. Even more important is

the tendency for wool prices to be affected by changes in domestic demand. Supply changes are not the dominant factors affecting wool prices (4).

Historically, wool prices have been characterized by wide fluctuations (Appendix Table 16). Most producers' marketing efforts are designed to combat the uncertainty of these fluctuations. His ability to accurately select the proper alternatives or combination of alternatives will greatly influence his returns.

When should he sell? He may sell wool "on the sheeps' backs" before shearing, or immediately after shearing time, or he may store his wool and incur storage costs in contemplation of higher prices.

To whom should he sell? Several types of buyers are available. Each may purchase wool for different purposes and offer varying prices.

How should he sell? Buyers purchase wool on both a graded or ungraded basis. If the wool grower sells on a graded basis the amount of wool in each grade is determined and a different price is normally paid for each grade. If the wool is paid for on an ungraded basis, one blanket price is paid for the entire clip. Should he incur the additional costs associated with grading in hopes his total net returns will be increased by price differentiation?

Several other factors may influence net prices received by wool growers. These factors, while not directly concerned with alternatives, nevertheless may influence the prices received and the producer's decisions in marketing his wool. Such factors are quality of the wool, the amount of shrinkage, size of the clip, costs of transporting wool to

large market centers such as Boston and Philadelphia, and other marketing costs.

Lack of information on costs and practices in marketing Utah wool impedes the producer in his effort to gain maximum returns.

Objectives of the Study

The objectives of this study are:

1. To investigate wool buying practices in Utah
2. To compare net prices received by producers selling graded wool and ungraded wool
3. To compare producer methods of marketing wool during a period of rising and falling prices
4. To compare producer costs of selling graded wool and ungraded wool
5. To investigate the quality of Utah wool

REVIEW OF LITERATURE

Little has been published regarding economic aspects of wool marketing in Utah. Previous work has been concerned primarily with technological aspects of marketing. Most publications concerning wool have been concerned with the improvement of wool quality, scouring tests, and increasing the weight of fleeces.

A Master's Thesis by Burke at the University of Wyoming in 1958 on wool marketing in three counties in Wyoming investigated marketing costs in Wyoming and prices received by wool growers selling to different market outlets. His study did not consider price differentials received for graded and ungraded wool.

Burke appraised the efficiency of the country market in reflecting terminal market (Boston) values of wool. During 1956 it was found that Wyoming growers prices averaged 3.2 cents per pound grease basis below Boston quotations after both were adjusted to a comparable basis. The spread was greatest at the beginning of the season and narrowed as the season progressed. It was noted that changes in Boston wool quotations frequently lag several weeks behind changes in near active futures. The futures price seemed more sentitive to changes in supply and demand than the spot price. With this in mind, growers were advised to follow wool futures quotations in order to anticipate changes in price on the Boston market.

Burke found marketing charges per pound on wool sold through Wyoming

cooperatives were 7.66 cents for 1956 and 8.21 cents for 1958. No comparison was made of prices paid by buyers purchasing wool at different times throughout the year (5).

Davis, Gabbard and Wooten reported findings from 1948 through 1954 on marketing Texas wool on a quality basis. It was found that wool quality generally increased with the size of clips.

All of the Texas wool graded as fine or offsorts.[1] The wool was of such uniform fineness that it could be designated as original bag wool.

Grading was done at the shearing pens and was mainly a process of dividing the fine wool according to staple length. Over a six-year period 90.4 percent of the wool graded fine staple, fine French combing, or fine clothing. The remaining 9.6 percent of the wool was tags and crutchings.

The cost of grading at the shearing pens was about .25 cents per pound of grease wool. Comparable prices of graded and ungraded wool for three years indicated a difference of about three cents net price per pound in favor of graded wool in Texas (6).

A regional report on the preparation and marketing of wool in nine Western States was published in 1952. The regional study was undertaken to ascertain if superior wool preparation could be advocated under existing facilities and conditions prevailing in the producing areas and in central wool markets.

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[1]Offsorts are those wools which are by-products of sorting such as black wool, tags, and crutchings. Tags are large locks of britch wool clotted with dung and dirt which are sheared off at the regular shearing time. When britch wool is sheared off ewes prior to lambing the wool is often referred to as crutchings.

In a number of experiments it was found that grading clips at the shearing pens brought small margins of profit in favor of grading. Graded wool sold from 1.0 to 4.88 cents per grease pound higher than ungraded wool. However, in several other experiments results indicated that losses were incurred by preparation of the clips since prepared wools sold for lower prices than similar lots of unprepared wool.

Grading for staple length only brought definite premiums amounting from 2 to 6 cents per grease pound. It was noted, however, that while length grading was advantageous on large clips, it should not be undertaken on small clips because the length subdivisions were too small to command market price preferences.

The cost of grading wool at the shearing pens varied from 0.28 cent to 1.21 cents per grease pound with an average of approximately 0.6 cent per grease pound in states where grading costs were studied. Grading for staple length alone was found to vary from 0.20 cent to 0.28 cent per grease pound.

Total costs for marketing grease wool varied from 5.51 cents to 7.45 cents with an approximate average cost of 6.70 cents per grease pound paid by the woolgrower.[1]

The regional study did not compare returns from ungraded wool and commercially graded wool during a period of rising and falling prices (15).

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[1]Total costs included grading and handling charges, transportation, insurance, commissions, storage, and in some cases core-testing.

SOURCE OF DATA AND METHOD OF PROCEDURE

Information for this study was obtained by personal interviews with wool buyers and from wool producer records on file in county Agricultural Stabilization and Conservation (A.S.C.) offices.

Thirty-five wool buyers, representing 17 different firms which handle Utah wool, were contacted and interviewed. An effort was made to contact buyers who purchase both small and large volumes of wool throughout the state.

A complete census of A.S.C. producer records was taken in all counties for the 1956 marketing year. The pounds of wool produced and the returns to producers for each county are listed in Table 17 of the Appendix.

For the purposes of this study, A.S.C. producer records in seven counties were analyzed in detail for the 1956 and 1957 marketing years. The same seven counties were used for analysis in both years. Figure 1 shows the location of the counties selected for this study.

The year 1956 was selected as an example of a period in which wool prices generally rose throughout. The year 1957 exemplified a period in which wool prices generally fell throughout.

In selecting sample counties to study, an effort was made to select representative counties from all areas of the state. Both large and small producing counties which sold a sizeable amount of both graded and ungraded wool were selected. Washington and Kane Counties were selected

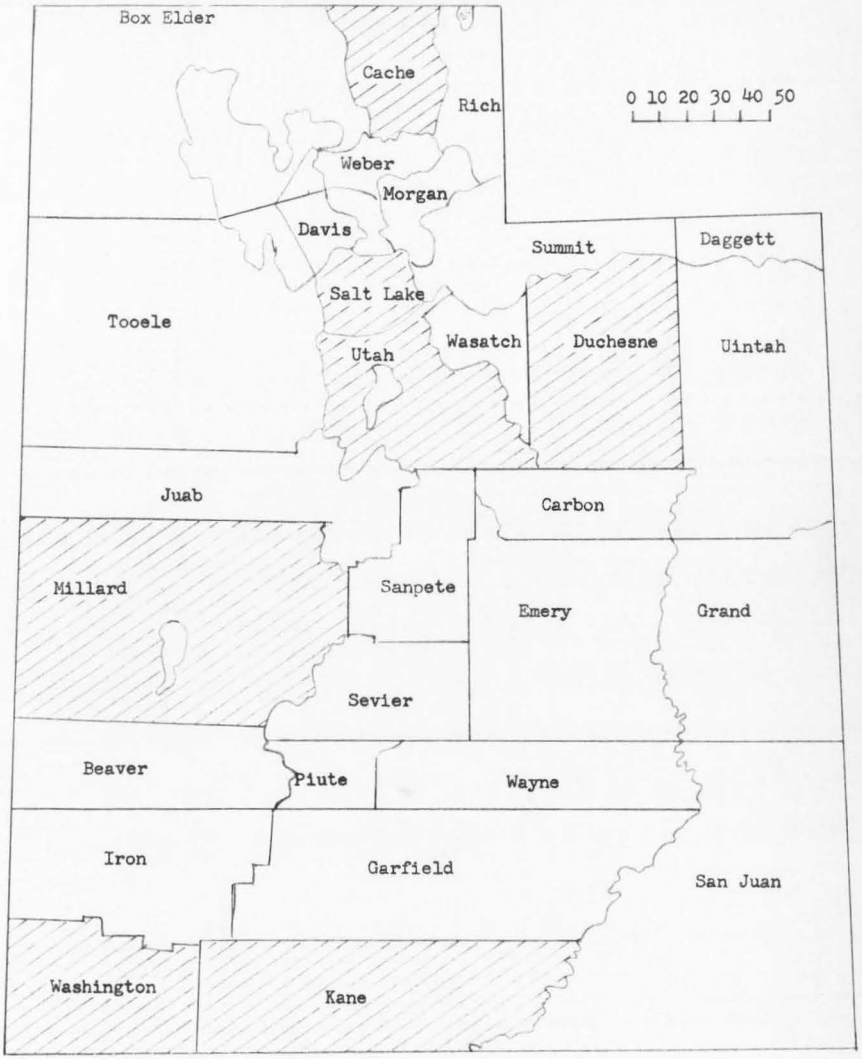

Figure 1. Location of counties selected for study area

from the southern part of the state; Millard, Utah, and Salt Lake Counties from the central part of the state; Duchesne from the eastern part; and Cache from the northern part of the state. These seven counties accounted for about 30 percent of the state's wool production in 1956 (10). In addition, they are representative of Utah wool production areas--Kane and Washington producing mainly fine wool, Millard, Salt Lake and Utah Counties producing mainly medium wool, and Cache and Duchesne producing coarser wool.

The wool marketing year as referred to in this thesis is from April 1 to March 31. A wool grower must file for the government wool incentive payment for any particular year between these dates. The 1956 marketing year, for example, was from April 1, 1956 to March 31, 1957.

Graded wool, as referred to in this study, means commercial or warehouse grading which takes into consideration length, condition, and fineness of the fiber. Marketing costs or charges are deductions producers must stand such as grading, storage, and transportation costs for graded wool and any deductions or discounts for offsorts when marketing on an ungraded basis. The marketing costs do not include the producer's cost of shearing or delivering wool to the buyer.

Figure 5 in the Appendix is a copy of the schedule used to collect the data from the A.S.C. offices. A separate schedule was used for each sale made by a grower. The net weight and gross price of each grade was recorded. Information on how tags were determined and the amount of marketing deductions were recorded in detail.

In order to get all sales on a comparable basis total marketing

deductions were subtracted from gross proceeds to give the net proceeds for each sale. The marketing charges deducted included handling charges, grading, storage, transportation, and at times miscellaneous charges such as insurance and coring. The commission was usually included with the handling charge.

After marketing charges were deducted the net selling price per pound was computed by dividing net proceeds by the net shipping weight. The net weight sold was used on graded sales because it was not known if all wool shipped had been sold. All data from producer records were coded and punched on IBM cards. IBM machines were used to process the data.

PRESENTATION AND ANALYSIS OF DATA

Marketing Channels and Practices in Utah

Wool growers in Utah have several market outlets where they may sell their wool. For the purpose of this study, buyers were classified into four main categories according to the type of firm they represented. The four categories were: independent buyers, Utah cooperatives, hide and fur dealers, and manufacturer buyers. Independent buyers represent themselves or other dealers and generally buy large lots of wool in comparison to some other type buyers. The independent buyer may purchase from producers or other small buyers and resell the wool to a number of manufacturing firms or other dealers. Utah cooperatives do not actually buy wool but act as agents in helping the producer sell his wool. However, they will be considered as buyers or market outlets in this study. Hide and fur dealers take in small lots of wool in connection with their business. The manufacturer buyer purchases wool from producers or other wool dealers for the particular company he represents.

Results of wool buyer survey

Thirty-five wool buyers representing 17 different firms which handle Utah wool were contacted and interviewed.[1] These buyers consisted of the following: 4 manufacturer buyers, 7 hide and fur dealers, 1 out-of-state cooperative, 1 Utah cooperative, and 22 independent buyers. These 35

[1]The A.S.C. producer records indicated that approximately 70 different wool buyers operate in Utah. The wool buyer survey, therefore, represents about a 50 percent sample.

buyers bought approximately 70 percent of the total wool sold in the state in 1956. The average price paid for the wool they purchased was 42 cents. Most of their purchases were made on a grease basis. One buyer bought on a clean basis but converted it to a great price for the producer's convenience.

Normal price deductions used by most buyers for ungraded wool included one percent off for tags, one-half price for crutchings, one-third off for black wool, one-third to one-half off for dead or murrain wool, no deduction to one-third off for buck wool, and a range of 2 to 8 cents off per grease pound for burry and seedy wool.

Buyers who estimated the percentage of offsorts in the wool they purchased indicated a range from 1 to 10 percent offsorts with an average of about 5 percent. Only nine buyers stated that offsorts were handled separately by them or their firm.

Both truck and rail transportation were employed by buyers to transport wool to concentration points and manufacturing areas. Most small local buyers utilized truck transportation to move their wool to larger buyers in the Salt Lake City area. Large buyers usually utilized railroads as a means of transporting their wool to the large manufacturing areas outside the state of Utah.

Of the buyers who reported the destination of their wool, approximately 69 percent was shipped to the New England area. Approximately 22 percent of the wool was reported as going to the Southeast, 6 percent to the Pacific Northwest, 2 percent was used by manufacturers in Utah, and about 1 percent went to the Midwest. It is doubtful that 69 percent of

the wool actually went to the New England area. As one buyer indicated, many of the head offices are still in New England, but much of the wool actually ends up in the Southeast. Cheaper labor and lower taxes are two of the main reasons for this movement of mills to the Southeast.

Roughly 90 percent of the buyers sold most of the wool they purchased to other dealers. The remaining 10 percent sold mostly to manufacturers. These manufacturer purchases, however, account for about 80 percent of the total wool purchased. The volume of wool purchased during the year varied from a few hundred pounds for local buyers with small operations to as high as 2 million pounds for other buyers who buy several large clips.

None of the buyers contacted bought wool on a graded basis.[1] Although none of the buyers bought wool on a graded basis, three indicated they sold wool on a graded basis.

Basic A.S.C. data on wool sales

The complete census of 1956 A.S.C. producer records in all counties indicated there were approximately 3500 wool growers in the state.[2] The seven-county sample included about 30 percent of these growers in 1956 (Table 2).

All data for detailed analysis will concern only the seven counties mentioned, but attention will be called to similar data on all counties when given in the Appendix.

The pounds of wool indicated for each county are not necessarily

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[1]Cooperatives do not actually buy wool, but they do a great deal of wool grading for producer members.

[2]See Appendix Table 17.

Table 2. Basic data on wool sales, selected Utah counties, 1956 and 1957 marketing years

County	No. growers	No. sales	Weight	Net proceeds	Avg. size of sale	Avg. return per grower	Avg. net price per lb.
			(pounds)	(dollars)	(pounds)	(dollars)	(cents)
				1956			
Cache	136	136	191,784	79,896.53	1,410	587	41.66
Duchesne	222	234	436,128	174,567.21	1,864	786	40.03
Kane	32	46	152,128	57,188.30	3,307	1,787	37.59
Millard	105	118	143,098	61,461.63	1,213	585	42.95
Salt Lake	237	296	1,610,455	688,509.03	5,441	2,905	42.75
Utah	267	315	1,011,379	463,133.49	3,211	1,735	45.79
Washington	42	51	90,509	32,994.20	1,775	786	36.45
Tot/Avg.	1,041	1,196	3,635,481	1,557,750.39	3,040	1,496	42.85
				1957			
Cache	136	139	167,890	92,178.27	1,208	678	54.90
Duchesne	227	228	371,365	185,431.26	1,629	817	49.93
Kane	17	17	92,674	45,512.85	5,525	2,677	49.11
Millard	74	76	56,850	28,434.41	748	384	50.02
Salt Lake	194	204	1,148,693	625,157.96	5,631	3,222	54.42
Utah	187	206	709,156	400,416.08	3,443	2,141	56.46
Washington	17	18	22,457	10,493.71	1,248	617	46.73
Tot/Avg.	852	888	2,569,085	1,387,624.54	2,893	1,628	54.01

the actual amount produced in that county. If a grower feeds sheep in one county but applies for his incentive payment in another the wool is credited to the county where he applied for payment. However, this proactice is not very common and would account for only a minor portion of the wool in any one county.

Throughout the analysis in comparing the 1956 and 1957 marketing years, one should keep certain facts in mind. The year 1956 was a period in which wool prices generally continued to rise throughout the marketing year and most producers sold all of the wool they produced. In contrast, 1957 was a year in which prices were generally falling and many producers held over a portion or all of their wool.[1] This probably accounts for the large difference in the number of growers for the two years. A grower may have produced wool in 1957 but if no part of it was sold during that year the A.S.C. records would not reflect his production.

The hold-over of a sizeable portion of the 1957 wool to 1958 was a primary reason for the difference of more than 1 million pounds more wool sold in 1956 than in 1957 in the sample areas. In each county more wool was sold in 1956 than in 1957 (Table 2). However, other sources indicate production was about the same in both years (10). In 1956 the weighted average price in the seven counties ranged from a low of 36.45 cents in Washington County to a high of 45.79 cents per grease pound in Utah County. The average price for all seven counties was 42.85 cents. The 1957 average price for all seven counties was 54.01 cents, 11.16 cents higher than in 1956. The range was established by the same two counties,

[1]Several producers were personally contacted who indicated they stored all of their 1957 wool until the 1958 marketing year.

Washington with a low average of 46.73 cents and Utah with a high average of 56.46 cents paid per grease pound of wool. The wool raised in southern Utah (including Washington County) contains a high percentage of fine wool which normally commands a relatively high price. However, one reason for the low selling price may be that southern Utah wool is characterized by having a high proportion of sandy, burry, and seedy wool.

The average size of sale was 3,040 pounds in 1956 compared to 2,893 pounds in 1957 but due to the high price early in 1957 the average return per grower was higher in 1957 than in 1956 (Table 2).

Market outlets for Utah wool

The A.S.C. producer records showed that independent buyers constituted the greatest market outlet by buying 62.1 percent of the wool (based on poundage) in the seven counties in 1956 (Figure 2). Manufacturer buyers accounted for 20.1 percent, cooperatives 15.8 percent, and hide and fur dealers purchased only 2.0 percent of the wool in the study area.

In 1957 independent buyers purchased 63.0 percent, manufacturer buyers 29.8 percent, cooperatives 4.3 percent, and hide and fur dealers only 2.9 percent of the wool.

Location was a factor affecting the prices paid by different type buyers (Table 3). In 1956 growers in four counties received highest average net prices from independent buyers, growers in two counties received highest prices from manufacturer buyers, and growers in one county received highest prices from cooperatives. In 1957 growers in

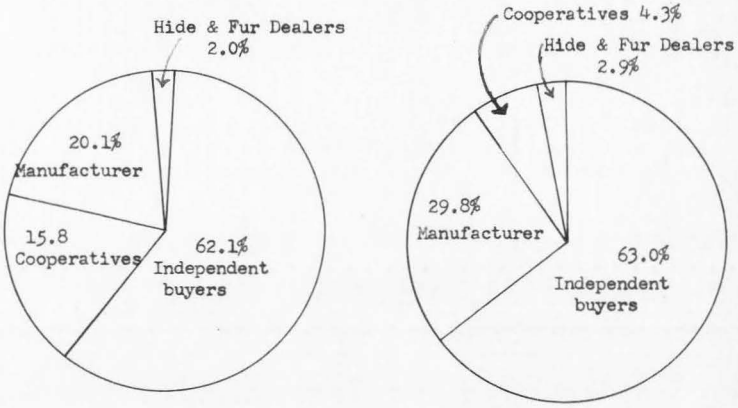

Figure 2. Percentage of wool purchased by type of buyer, selected Utah counties, 1956 and 1957 marketing years

Table 3. Relationship of quantity purchased and net price per pound to type of buyer and county, selected Utah counties, 1956 and 1957 marketing years

County	Type of buyer: Utah Coops.[a] Percent of total weight	Utah Coops.[a] Avg. price (cents)	Independent Percent of total weight	Independent Avg. price (cents)	Hide & Fur Percent of total weight	Hide & Fur Avg. price (cents)	Manufacturer Percent of total weight	Manufacturer Avg. price (cents)	Total weight (pounds)
				1956					
Cache	20.6	48.20	79.2	39.95	0.1	33.82	0.1	51.74	191,784
Duchesne	20.6	43.46	71.0	39.57	8.3	35.46	0.1	35.05	436,128
Kane	90.5	36.99	5.5	43.48	3.3	42.98	0.7	43.27	152,128
Millard	5.0	42.42	64.2	45.01	5.8	37.82	25.0	38.97	143,098
Salt Lake	7.8	42.13	59.4	43.11	0.1	36.65	32.7	42.26	1,610,455
Utah	12.0	44.94	72.5	47.00	1.4	36.74	14.1	41.18	1,011,379
Washington	57.0	36.45	8.9	29.55	7.2	35.36	27.0	39.04	90,509
Tot/Avg.	15.8	41.61	62.1	43.70	2.0	36.52	20.1	41.79	3,635,481
				1957					
Cache	8.4	44.00	90.0	55.94	0.5	49.62	0.2	53.68	167,890
Duchesne	17.9	44.32	36.9	52.47	10.6	45.87	34.6	51.39	371,365
Kane	2.9	42.27	31.8	50.41	1.3	47.98	64.0	48.80	92,674
Millard	4.2	51.47	19.8	50.54	14.7	49.22	61.3	49.94	56,850
Salt Lake	0.5	47.50	64.7	53.90	--[b]	46.80	34.8	55.50	1,148,693
Utah	2.8	53.83	75.2	57.23	2.3	49.61	19.7	54.72	709,156
Washington	2.5	49.85	46.4	49.96	34.9	41.17	16.2	48.97	22,457
Tot/Avg.	4.3	46.24	63.0	54.96	2.9	46.65	29.8	53.87	2,569,085

[a]Producers selling wool through a cooperative are often charged more than the actual cost of handling the wool. This excess is later refunded to patrons. During the approximate period from 1945-55 the Utah Wool Marketing Association, for example, paid an average patronage refund of about one-half cent per pound per year. The refunds normally lag five years. The amount of the refund is not guaranteed and may vary from year to year. This analysis does not include any such refunds in considering cooperative prices.

[b]Less than 0.1 percent.

five counties were paid highest average net prices by independent buyers, growers in one county were paid highest prices by manufacturer buyers, while growers in the remaining county received highest prices by selling through cooperatives. In both years the average for all counties showed independent buyers paid highest prices for wool. Independent buyers paid an average of 43.70 cents in 1956 compared to a low average of 36.52 cents per pound paid by hide and fur dealers. In 1957 independent buyers paid an average of 54.96 cents compared to a low average of 46.24 cents per pound paid for wool sold through Utah cooperatives.

The percent of wool purchased in each county by different buyers varied considerably during the two-year period (Table 3). The most extreme changes were in the amount sold through cooperatives and to manufacturer buyers. The percent sold through cooperatives in 1956 declined in all seven counties in 1957, while the percent sold to manufacturer buyers increased in all except one county during the same period. The tendency for manufacturers to buy directly from the producer rather than at terminal markets is prevalent in the wool industry today. The facilities of at least one large independent buyer in Utah have been taken over by a manufacturing concern since the period covered by this data. This large topmaker has its own buying organization with a warehouse in Utah where it assembles and grades the wool prior to shipment to its own mills.

The time of greatest buying activity of different type buyers is indicated in Table 4. In both 1956 and 1957 the largest amounts of wool were purchased in May which corresponds to shearing time in most parts of

Table 4. Relationship of quantity purchased and net price per pound to type of buyer and time of sale, selected Utah counties, 1956 and 1957 marketing years

Date	Type of buyer							
	Utah Coop.		Independent		Hide & Fur		Manufacturer	
	Weight (pounds)	Avg. price (cents)	Weight (pounds)	Avg. price (cents)	Weight (pounds)	Avg. price (cents)	Weight (pounds)	Avg. price (cents)
				1956				
April	--	--	207,464	38.98	7,967	35.65	175,337	41.33
May	--	--	594,750	40.54	37,410	35.61	338,138	41.83
June	--	--	376,217	41.41	6,455	38.07	203,549	42.04
July	--	--	120,010	43.32	6,437	33.60	553	43.37
August	93,427	41.82	103,988	41.35	2,197	30.88	514	36.61
September	186,570	36.84	284,585	46.12	936	36.39	203	41.52
October	167,529	44.03	213,397	48.41	--	--	763	40.87
November	103,829	45.62	85,390	46.64	136	29.40	217	37.88
December	--	--	17,424	47.06	553	35.77	496	42.40
January	1,052	42.08	14,807	44.99	75	41.00	--	--
February	17,548	42.98	87,246	53.56	458	39.61	180	55.00
March	2,944	49.98	155,294	51.05	8,464	43.82	10,972	43.16
Tot/Avg.	572,899	41.61	2,260,572	43.70	71,088	36.52	730,922	41.79
				1957				
April	231	42.63	382,378	56.39	39,329	44.39	99,041	52.04
May	1,233	54.74	649,585	55.51	16,111	50.55	412,441	53.18
June	--	--	190,199	55.02	12,417	53.35	132,968	52.92
July	--	--	367,374	52.99	591	51.79	444	47.94
August	8,538	43.93	14,821	54.47	293	48.09	120,794	58.78
September	20,641	54.51	1,651	47.57	--	--	73	40.00
October	--	--	244	18.00	--	--	--	--
November	--	--	166	48.84	398	46.06	--	--
December	--	--	389	39.05	--	--	73	51.29
January	80,785	44.26	80	34.56	142	39.54	--	--
February	--	--	9,731	39.80	--	--	207	53.09
March	--	--	535	36.99	4,796	34.17	--	--
Tot/Avg.	111,428	46.24	1,617,153	54.96	74,077	46.65	766,041	53.87

the state. Producers selling through cooperatives usually consign their wool around shearing time but few sales were recorded until August in both years. Average net prices paid by different type buyers varied widely from month to month. In 1956 hide and fur dealers consistently paid the lowest average prices. Manufacturer buyers paid highest average prices during the first four months (April to July) of the 1956 marketing year and the following February; cooperatives paid highest average prices in August, while independent buyers paid highest average prices from September through January and the following March.

The 1957 marketing year was somewhat of a contrast in that independent buyers paid highest average net prices from April through July, and during November and March. Manufacturer buyers paid highest average prices in August, December, and February while cooperatives paid highest average prices in September and the following January.

Size of clip

A factor influencing the net price paid by various type buyers is the size of clip. Results of classifying the wool (by buyer) into six different clip sizes are shown in Table 5. In general, the weighted average price paid per pound by all buyers increased as size of the clip increased during both years. However, prices paid by individual types of buyers for different sized clips did not follow a consistent pattern. Independent buyers were the only ones who consistently paid higher prices as the size of the clip increased (with one exception)[1] over the two-year period.

Independent buyers purchased the largest number of clips within

[1]In 1956 independent buyers paid higher prices for clips from 5,000 to 20,000 pounds than for clips over 20,000 pounds.

Table 5. Relationship of net price per pound to size of clip and type of buyer, selected Utah counties, 1956 and 1957 marketing years

Type buyer	Size of clip (pounds)												Total no. sales	Avg. price (cents)
	Under 500		500-1000		1000-2000		2000-5000		5000-20,000		Over 20,000			
	No. sales	Avg. price (cents)	No. sales	Avg. price (cents)	No. sales	Avg. price (cents)	No. sales	Avg. price (cents)	No. sales	Avg. price (cents)	No. sales	Avg. price (cents)		
						1956								
Utah Cooperatives	201	45.36	59	44.23	30	44.77	29	45.54	13	37.88	7	40.85	339	41.61
Independent	365	38.85	100	41.80	42	42.09	57	43.59	41	44.33	35	43.91	640	43.70
Hide & Fur	123	36.65	14	38.18	6	35.75	2	34.10	--	--	1	36.82	146	36.52
Manufacture	54	42.57	1	41.63	1	39.59	1	18.44[a]	3	40.66	11	41.91	71	41.79
Tot/Avg.	743	40.61	174	42.38	79	42.49	89	43.73	57	42.63	54	42.98	1196	42.85
						1957								
Utah Cooperatives	183	45.44	26	43.73	28	45.30	6	49.84	1	51.66	--	--	244	46.24
Independent	300	50.11	59	51.11	34	51.91	29	52.54	24	54.92	23	55.68	469	54.96
Hide & Fur	96	47.41	12	50.62	3	49.14	7	46.14	2	44.85	--	--	120	46.65
Manufacture	29	50.21	1	51.46	--	--	3	43.26	5	54.93	17	53.99	55	53.87
Tot/Avg.	608	48.29	98	49.09	65	49.04	45	50.44	32	54.21	40	55.02	888	54.01

each of the size classifications during both years (Table 5). As discussed previously, independent buyers also purchased the greatest amount of wool in the study area. However, the total number of clips purchased by other type buyers was not directly related to the total amount of wool they purchased. During both years the next higher number of clips were purchased by cooperatives, hide and fur dealers, and manufacturer buyers, in that order. In total pounds of wool purchased, however, the ranking was manufacturer buyers, cooperatives, and hide and fur dealers, in that order (Figure 2). This indicates that manufacturer buyers purchased fewer but relatively larger clips in comparison to cooperatives and hide and fur dealers.

Wool buying on a graded or ungraded basis

Every type of buyer purchased wool on an ungraded basis but only cooperatives and independent buyers paid producers on a graded basis in 1956 (Table 6). Cooperatives were the only firms that paid producers on a graded basis on sales recorded in 1957. Only nine sales were made on a graded basis to independent buyers in 1956. These sales accounted for 162,504 pounds or an average of 18,056 pounds per sale which is considerably above the average size of clip. Wool sold through cooperatives in 1956 on an ungraded basis was mainly large clips. The 10 clips sold ungraded through cooperatives accounted for 145,807 pounds or an average of 14,581 pounds per sale. The large size of these clips may account for the slightly higher price received for ungraded wool in cooperatives, and the price of graded wool being higher than ungraded wool when sold to independent buyers in 1956.

Table 6. Quantity purchased and net price per pound paid by type of buyer for graded, ungraded, and offsort wools, selected Utah counties, 1956 and 1957 marketing years

Type buyer	Graded			Ungraded			Offsorts		
	No. sales	Quantity (pounds)	Avg. price (cents)	No. sales	Quantity (pounds)	Avg. price (cents)	No. sales	Quantity (pounds)	Avg. price (cents)
					1956				
Utah Cooperatives	328	426,868	41.56	10	145,807	41.78	1	224	9.50
Independent	9	162,504	44.17	622	2,079,930	43.89	9	18,138	18.27
Hide & Fur	--	--	--	146	71,088	36.52	--	--	--
Manufacturer	--	--	--	70	728,905	41.85	1	2,017	18.44
Tot/Avg.	337	589,372	42.29	848	3,025,730	43.12	11	20,379	18.19
					1957				
Utah Cooperatives	240	110,350	46.15	4	1,464	52.83	--	--	--
Independent	--	--	--	467	1,616,869	54.96	2	284	18.79
Hide & Fur	--	--	--	119	73,996	46.66	1	81	36.00
Manufacturer	--	--	--	55	766,041	53.87	--	--	--
Tot/Avg.	240	110,350	46.15	645	2,458,370	54.37	3	365	22.61

In both years highest average prices, whether on a graded or ungraded basis, were paid by independent buyers.

Deductions for offsorts

The A.S.C. producer records showed essentially the same results as the wool buyer survey concerning deductions for offsorts. It is a common procedure for buyers to deduct for offsorts (Table 7). The 1956 data show that 85.6 percent of the sales had some type of deduction for offsorts while 86.3 percent of the sales in 1957 showed similar deductions.

Several variations of deducting for offsorts were used by buyers. Most buyers who purchased wool outright on an ungraded basis made a 1 percent weight deduction with no payment for the offsort wool (type 1 deduction). Other buyers deducted a larger weight percent but paid a specified lower price per pound for all offosrts (type 2). When wool was sold on a graded basis the offsorts were usually determined when the wool was graded rather than deducting a fixed percent of the net weight. The offsorts from graded wool were bought at a reduced price, usually about one-third to one-half the price of the other wool (also type 2).

In a few cases the buyer combined two deduction practices. He deducted a small percent without payment plus an additional amount on which some payment was made (type 3). This combination method was used by buyers when the grower had sacked some of the offsorts separately. An additional deduction was made for offsorts remaining in the clip. A number of sales showed no visible deductions of any kind (type 4). It is probable that the offsorts were taken into account when the buyer made a price offer.

Table 7. Percent sales and net price per pound by type of offsort deduction, selected Utah Counties, 1956 and 1957 marketing years

Type deduction	Number sales	Percent of total sales	Average price
			(cents)
	1956		
(1) Deduction with no payment	660	55.2	43.05
(2) Deduction with payment for offsorts	361	30.2	42.73
(3) Deduction with payment for part of the offsorts	3	0.2	26.81
(4) No deductions	172	14.4	40.19
Tot/Avg.	1196	100.0	42.85
	1957		
(1) Deduction with no payment	498	56.1	54.46
(2) Deduction with payment for offsorts	268	30.2	51.42
(3) Deduction with payment for part of the offsorts	--	--	--
(4) No deductions	122	13.7	55.41
Tot/Avg.	888	100.0	54.01

The average net price per pound varied depending on the type of deduction employed (Table 7). There were no sales in 1957 in which a combination method (type 3) was used. The three sales made on this basis in 1956 contained a higher percent of offsorts than usual and so the price is not representative of wool of normal quality. In comparing the net price per pound on the other three types of deductions, a weight deduction with no payment (type 1) resulted in a higher price in 1956. However, in 1957 the practice of no visible deductions (type 4) resulted in a higher net price per pound.

Importance of the method of marketing wool

Data presented in this section suggest that the type of buyer is important to wool growers. In addition, prices may be affected by factors such as time of sale, location of the grower, quality of the wool, the size of clip, marketing charges, and whether the wool is sold on a graded or an ungraded basis. By analyzing what happens to the price of graded and ungraded wool some of these factors may be held relatively constant.

To illustrate, most graded wool was handled through one type of buyer (cooperatives), marketing charges were relatively constant for clips of equal size, and most graded wool was sold late in the year. Also, most ungraded wool was handled by independent dealers or manufacturers, deductions for offsorts were about constant, and most of the wool was sold early in the wool marketing year. Therefore, a comparison of graded and ungraded wool prices will tend to hold some factors fairly constant and give an indication of price differences for the two methods of marketing.

Price Relationships of Graded and Ungraded Wool

In an effort to maximize net returns, wool producers are faced with the alternative of marketing wool graded or ungraded. The choice they make may influence the costs and methods of marketing employed. As mentioned in the previous section, selling wool graded or ungraded may directly or indirectly influence the type of buyer to whom they sell, the time of sale, the marketing costs, and the net price received.

In 1956 in the seven-county sample, 16.2 percent of the wool was sold on a graded basis while in 1957 only 4.3 percent was sold as graded wool (Table 8). This decrease in percent sold graded was the result of fewer growers selling graded wool and a large amount of wool being held over to 1958. The amount of wool sold on a graded basis varied widely among counties. In 1956, for example, 75.5 percent of the Kane County wool was sold on a graded basis, while only 3.7 percent of the Salt Lake County wool was sold on this basis. The percent sold on a graded basis declined in every county in 1957. Duchesne County producers sold 17.9 percent while Salt Lake County producers sold only 0.4 percent of their wool on a graded basis.

In 1956 growers in four counties received higher average prices for graded wool and growers in two counties (Kane and Utah) received higher average prices for ungraded wool (Table 3).[1] The difference for Washington County was so small that the price for graded and ungraded wool could be considered essentially the same. In 1957 growers in five counties received higher average prices for ungraded wool and growers in only two counties

[1]All prices given for graded and ungraded wool are net prices.

Table 8. Relationship of quantity sold and net price per pound to graded, ungraded and offsort wools by county, selected Utah counties, 1956 and 1957 marketing years[a]

County	Graded			Ungraded		Offsorts	
	Weight sold	Percent of total wt.	Avg. price	Weight sold	Avg. price	Weight sold	Avg. price
	(pounds)		(cents)	(pounds)	(cents)	(pounds)	(cents)
				1956			
Cache	39,472	20.6	48.20	152,312	39.97	--	--
Duchesne	141,483	32.4	42.81	294,421	38.71	224	9.50
Kane	114,857	75.5	36.28	37,271	41.64	--	--
Millard	64,106	44.8	46.57	78,992	40.02	--	--
Salt Lake	59,034	3.7	44.11	1,533,888	42.99	17,533	17.60
Utah	118,805	11.7	44.82	889,952	45.99	2,622	22.88
Washington	51,615	57.0	36.45	39,894	36.46	--	--
Tot/Avg.	589,372	16.2	42.29	3,025,730	43.12	20,379	18.19
				1957			
Cache	14,153	8.4	44.00	153,737	55.91	--	--
Duchesne	66,589	17.9	44.32	304,776	51.16	--	--
Kane	2,685	2.9	42.27	89,989	49.31	--	--
Millard	2,356	4.1	51.47	54,494	49.95	--	--
Salt Lake	4,645	0.4	45.58	1,143,764	54.57	284	18.79
Utah	19,365	2.7	53.97	689,710	56.54	81	36.00
Washington	557	2.5	49.85	21,900	46.65	--	--
Tot/Avg.	110,350	4.3	46.15	2,458,370	54.37	365	22.61

[a]The offsorts column includes only sales in which the entire sale was offsorts. The graded and ungraded columns include offsorts when they were sold as part of the entire clip.

(Millard and Washington) received more from graded wool. The average net price per pound of graded wool for all counties increased from 42.29 cents in 1956 to 46.15 cents in 1957. The average net price of ungraded wool increased from 43.12 cents in 1956 to 54.37 cents in 1957.[1]

Time of sale

An important factor influencing the price difference between graded and ungraded sales during this two-year period was the time of sale. As shown in Tables 19 and 20 in the Appendix, most of the graded wool was stored and sold after August in both 1956 and 1957. The greater part of the ungraded wool was sold before August in both years. As mentioned previously, cooperatives handled the greater portion of the graded wool in Utah (Table 6). One of the primary reasons for the establishment of cooperatives was to deter wool dealers from lowering prices paid to producers at shearing time. For this reason some cooperatives have often held their wool until later in the year. However, this practice has not always resulted in higher prices for cooperative members. In 1956 when prices were rising the greater percent of the counties benefited by selling graded wool (Table 8). In 1957 when prices were falling more of the counties benefited by selling ungraded wool. However, on a weighted average for all seven counties, ungraded wool brought 0.83 cent and 8.22 cents per pound more than graded wool in 1956 and 1957, respectively.

Price Trends.--The price received for graded and ungraded wool tended to fluctuate considerably by half-month periods (Figure 3).

[1]Similar 1956 data for all counties in Utah are summarized in Appendix Table 18.

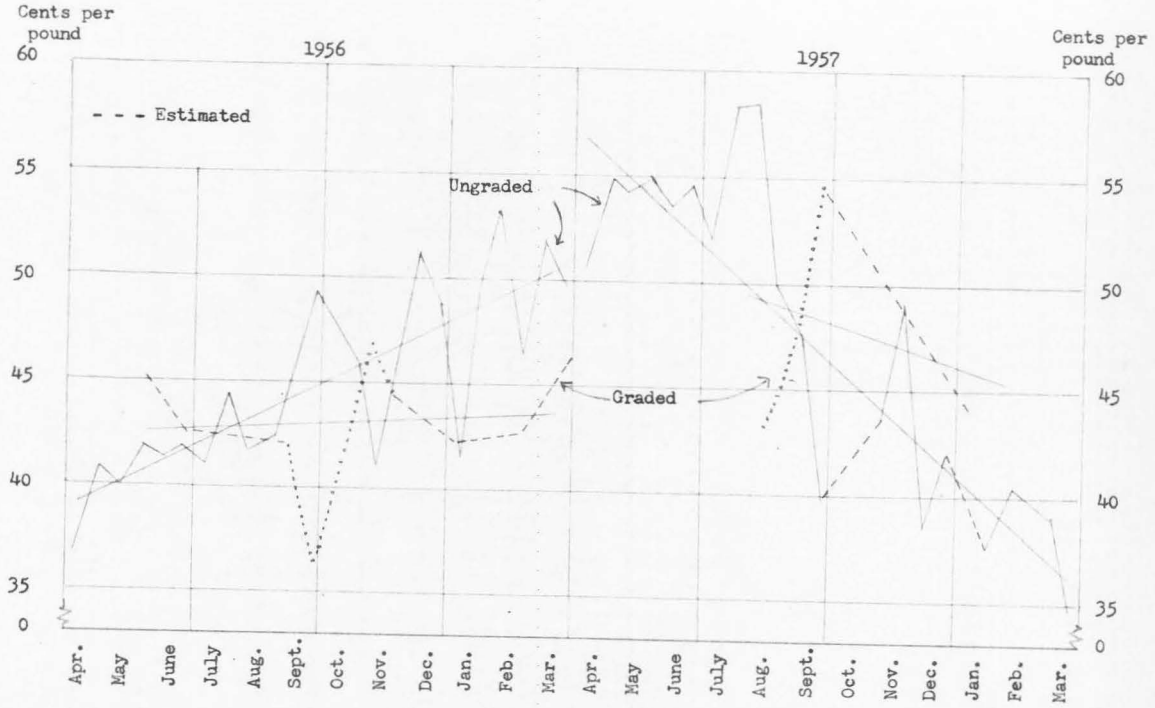

Figure 3. Semi-monthly net prices for graded and ungraded wools with trend shown, selected Utah counties, 1956 and 1957 marketing years

However, the trend of average monthly prices in Utah closely followed the national trend during the period studied (1).

The price trend lines for graded and ungraded wools are shown in Figure 3.[1] On the average, the 1956 price of graded wool was found to increase .06 cent every half-month from May 16 (when the first price was established) to the end of the 1956 marketing year. The 1957 price of graded wool decreased an average of .11 cent every half-month from August 1 (when the first price was established) to January 30 (last established price of Utah graded wool in the 1957 marketing year). These price changes for graded wool were not statistically significant during either year.[2] The lack of completely accurate selling dates for graded wool, as shall be discussed later, may have been a reason for lack of significance.

Price data for ungraded wool were available throughout both years so the trend lines extend through the entire marketing year. Ungraded wool prices increased an average of .25 cent every half-month during the 1956 marketing year and decreased an average of .46 cent every half-month during the 1957 marketing year. The semi-monthly price changes for ungraded wool were statistically significant during both years.[3]

These data indicate that the price of ungraded wool increased faster than graded wool in 1956 when prices were rising. In 1957 when prices

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[1]The slope of the trend lines indicate the change in price per unit change in time (half-month periods).

[2]The b values were +.06 in 1956 and -.11 in 1957; both were non-significant at the 10 percent level as tested by "t" test.

[3]The b values were +.25 in 1956 and -.46 in 1957; both were significant at the 1 percent level as tested by "t" test.

were going down, the price of ungraded wool fell more rapidly than graded wool. This suggests that a producer must accept more uncertainty when selling on an ungraded basis. Or in other words, if selling on an ungraded basis, the price may rise faster but may also fall faster than if selling on a graded basis.

Prices of graded and ungraded wool tended to vary considerably from their respective trend lines during both years. In general there were wide price variations from August to January as opposed to low variations during other months.

The price fluctuations of graded and ungraded wool were not always in the same direction and did not occur at the same time. Part of this discrepancy may have been caused by the fact that the recorded date of sale for graded wool is not always accurate for all grades within a clip. Except for extra large clips which may be graded separately, all graded wool handled by state cooperatives loses its grower identity. After wool is consigned and delivered to a cooperative it is usually sold only when officials of the local state association and the National Wool Marketing Association think it best. Each grower's wool is weighed and graded into as high as 12 to 16 different grades according to quality, color, fineness, and length.

After the clip has been divided into several different grades the pounds of wool in each grade including offsorts are credited to the grower. The wool is then stacked in large piles with other wool of like grade and quality. From this point it has lost its identity for any one grower. Buyers may purchase the wool on the basis of an appraiser's description, or they may visit the state warehouse and buy direct. One grade of wool--

say choice one-half blood staple--may be sold three to six months before other grades of a grower's clip. The only date listed on A.S.C. producer records to indicate date of sale for graded wool was the date storage charges ceased. This date represented the average date storage charges ceased rather than the actual date of sale for each grade.

Using the average date storage charges stopped for graded wool rather than actual selling dates (which were not available) for each grade often caused graded wool prices to be radically different from ungraded wool prices during the same half-month period. It is doubtful that the price differences are as wide as sometimes indicated in Figure 3. History of the wool market indicates that with up-to-date marketing information, changes in wool prices are quickly reflected throughout the United States.

The limitations of the graded wool data should be kept in mind when observing the large price differences of graded and ungraded wool shown in Figure 3. The average price of graded wool from September 16 to 30, 1956 was low (36.29 cents) relative to the price of ungraded wool (49.13 cents).[1] A month and one-half later the reverse was true. Graded wool reached its highest average price of the 1956 marketing year (47.07 cents) while ungraded wool was relatively low (40.85 cents). This same relationship was noticed in 1957. Graded wool prices were at their lowest average (42.63 cents) from August 1 to 15, 1957 while ungraded prices reached their peak (58.30 cents) during this period.

Quantity sold.--The average net semi-monthly prices of all wool (excluding those sales which were all offsorts) sold in Utah during the

[1]See Appendix Tables 19 and 20 for actual semi-monthly prices.

1956 and 1957 marketing years are shown in Figure 4. Also shown in Figure 4 are the pounds of wool sold (including offsorts) during this same period of time.

There appears to be little relationship between the amount of wool sold in Utah and the change in price during this two-year period. The price of wool was probably unaffected by the supply in Utah because wool is a product on a world-wide market rather than a strictly domestic market. The approximately 12 million pounds of wool produced in Utah yearly would be a very small percent of the total yearly world production of about 5 billion pounds (3).

The largest amount of wool sold during each year occurred between May 1 to 15 of both years. This time corresponds closely to the shearing time in most parts of the state. The peak amount sold in 1956 on the dates indicated above was 552,092 pounds of which 99 pounds was offsorts sold separately. During the same period in 1957 a total of 658,385 pounds was sold which included 81 pounds of offsorts sold separately (Appendix Tables 19 and 20).

The data indicate there was more tendency to hold wool for later sale in 1956 when prices were rising and to sell early in 1957 when prices were falling. Although the total pounds of wool sold in 1957 was over 1 million pounds less than in 1956, the total pounds sold before August 15, 1957 (when prices started to drop) was greater than that sold in 1956 during the same period. In 1956 only 61.9 percent of the wool was sold before August 15 while 95.1 percent of the 1957 wool was sold by the same date. Producers apparently felt prices were about to their peak

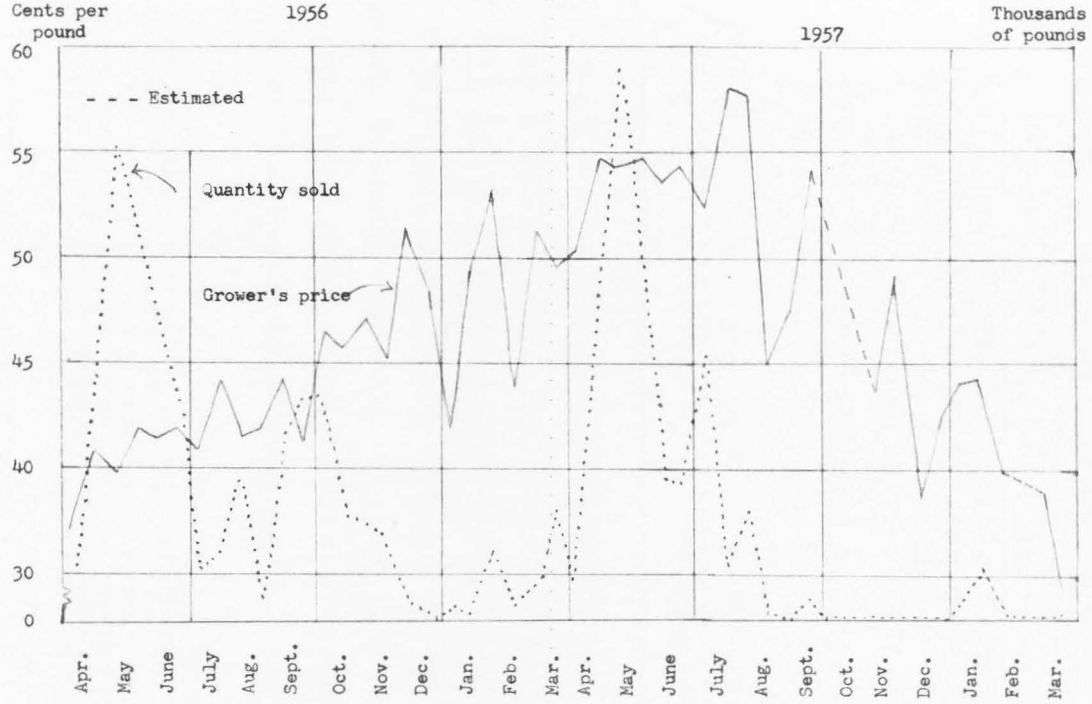

Figure 4. Quantity of wool sold and semi-monthly net prices received, selected Utah counties, 1956 and 1957 marketing years

early in 1957 and most of them sold their wool for high prices. Of course many growers sell shortly after shearing regardless of price. One factor which may influence some wool growers to sell early each year is the U.S. government incentive program. These growers who sheared before March 31, 1957, for example, could have sold their wool in the 1956 marketing year and received the 1956 incentive payment.

Price ranges of graded and ungraded wool

All price data presented in previous sections concerning graded and ungraded wool have been averages of all producers within a county or all producers in the study area. However, to the individual producer the average price recorded for all wool in Utah during any particular year is not as important as the average price he received for his individual clip. To illustrate the price range faced by producers during each year the highest and lowest net price per clip of graded and ungraded wool were determined. In 1956 graded wool prices ranged from 33.00 to 54.93 cents per grease pound, a spread of 21.93 cents. Ungraded wool prices ranged from 19.84 to 63.00 cents, a spread of 43.16 cents.

In 1957 graded wool prices had a spread of 37.95 cents, ranging from a low of 23.54 to a high of 61.49 cents per pounds. Prices of ungraded wool varied from 30.00 to 65.96 cents, a spread of 35.96 cents. The percent of sales within various 5 cent ranges between the two extremes are shown in Table 9. The data in Table 9 show a greater percentage of graded sales brought higher prices than ungraded sales in 1956, while the reverse was true in 1957. This suggests that on the average a

Table 9. Percent sales within 5 cent price ranges of graded and ungraded wools, selected Utah counties, 1956 and 1957 marketing years

Price ranges	Graded sales	Ungraded sales	Graded sales	Ungraded sales
(cents)	(percent)	(percent)	(percent)	(percent)
	1956		1957	
0-20	0.0	0.2	0.0	0.0
20-25	0.0	1.1	0.4	0.0
25-30	0.0	5.0	0.0	0.0
30-35	2.1	16.4	0.4	1.2
35-40	7.4	34.3	1.3	3.4
40-45	33.2	25.1	55.4	7.0
45-50	40.4	11.2	31.7	33.2
50-55	16.9	6.0	7.1	43.1
55-60	0.0	0.6	2.9	11.2
60 and over	0.0	0.1	0.8	0.9
Total	100.0	100.0	100.0	100.0

producer would have had a greater chance of obtaining a higher price for his wool by selling on a graded basis in 1956 and on an ungraded basis in 1957. However, with a few individual cases the reverse was true. On a weighted average for all counties the ungraded wool brought higher prices even during 1956 because the few highest priced clips of ungraded wool were relatively large clips.[1]

Size of clip

The price relationships of graded, ungraded, and offsort wools to size of clip are given in Table 10. In 1956 producers selling clips weighing under 5,000 pounds received higher average prices when the wool was sold on a graded basis. Clips weighing over 5,000 pounds received higher average prices when sold on an ungraded basis. The prices for offsorts did not vary consistently with the size of the clip. The price for offsorts bagged separately fluctuates a great deal due to large differences in shrinkage and quality factors.

The price of ungraded wool in 1956 and 1957 generally increased as the size of the clip increased. On the other hand, graded wool prices in 1956 did not show a consistent increase with an increase in size of clip. Clips under 500 pounds brought an average of 45.71 cents per pound, while clips over 20,000 pounds brought only 42.34 cents. One factor influencing this difference was that most small graded clips were sold late in 1956 when prices were high, whereas larger clips were sold earlier for lower prices.

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[1] These relationships were discussed in earlier sections of this analysis.

Table 10. Relationship of quantity sold and net price per pound to graded, ungraded, and offsort wools, and size of clip, selected Utah counties, 1956 and 1957 marketing years

Size of clip (pounds)	Graded			Ungraded			Offsorts		
	No. sales	Weight sold (pounds)	Avg. price (cents)	No. sales	Weight sold (pounds)	Avg. price (cents)	No. sales	Weight sold (pounds)	Avg. price (cents)
					1956				
0-500	199	40,795	45.71	538	94,726	38.65	6	920	16.39
500-1,000	58	43,525	44.41	114	80,536	41.44	2	1,363	33.42
1,000-2,000	30	39,758	44.77	48	70,775	41.88	1	1,542	12.00
2,000-5,000	28	79,587	45.38	60	182,206	43.29	1	2,017	18.44
5,000-20,000	17	188,977	39.18	39	436,288	44.96	1	14,537	17.50
20,000 & over	5	196,730	42.34	49	2,161,199	43.04	-	--	--
Tot/Avg.	336	589,372	42.29	848	3,025,730	43.12	12	20,379	18.19
					1957				
0-500	180	28,400	45.21	425	71,448	49.66	3	365	22.61
500-1,000	25	17,884	43.43	73	50,963	51.07	-	--	--
1,000-2,000	28	38,558	45.30	37	53,759	51.73	-	--	--
2,000-5,000	6	17,577	49.84	39	122,614	50.53	-	--	--
5,000-20,000	1	7,889	51.66	31	366,479	54.26	-	--	--
20,000 & over	-	--	--	40	1,793,107	55.02	-	--	--
Tot/Avg.	240	110,350	46.15	645	2,458,370	54.37	3	365	22.61

The 1041 growers in 1956 and 852 growers in 1957 were mainly small producers. A few producers had two or more sales during one marketing year resulting in 1196 and 888 total sales for 1956 and 1957, respectively (Table 11). There were 743 sales under 500 pounds in 1956 or 62.1 percent of the total sales. There were 608 sales under 500 pounds in 1957 or 63.5 percent of the total sales. In both years the percentage of sales over 20,000 pounds was only 4.5 percent of the total sales. This indicates that the greater percentage of Utah wool growers are raising only small farm flocks. A clip of 500 pounds represents about 50 head of shorn sheep at the 1956 average of 9.9 pounds of wool per sheep.

While producers with small flocks of sheep make up the largest percent of Utah wool growers, producers with large scale operations account for the greater portion of the pounds of wool raised in Utah. The 54 sales over 20,000 pounds in 1956 accounted for 64.9 percent of the total wool sold, and the 40 sales over 20,000 pounds in 1957 amounted to 69.8 percent of the total (pounds given in Table 10).

Specific Costs of Marketing Utah Wool[1]

In comparing net prices for graded and ungraded wool, marketing costs are an important consideration. These costs often vary with time, with different buyers, and with the method of marketing employed. As mentioned in the section on buyer deductions for offsorts, most ungraded

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[1]Marketing costs or charges are deductions producers must stand such as grading, storage, and transportation costs for graded wool, and any deductions or discounts for offsorts when marketing on an ungraded basis. The marketing costs referred to in this thesis do not include the producer's cost of shearing or delivering his wool to a buyer.

Table 11. Relationship of net price per pound to size of clip and time of sale, selected Utah counties, 1956 and 1957 marketing years

Time of sale	Size of clip (pounds) 0-500 No. sales	0-500 Avg. price	500-1000 No. sales	500-1000 Avg. price	1000-2000 No. sales	1000-2000 Avg. price	2000-5000 No. sales	2000-5000 Avg. price	5000-20,000 No. sales	5000-20,000 Avg. price	20,000 & over No. sales	20,000 & over Avg. price	Total no.of sales	Avg. price
(month)		(cents)		(cents)		(cents)		(cents)		(cents)		(cents)		(cents)
						1956								
April	107	35.16	10	41.59	3	37.30	3	40.06	2	30.19[a]	8	41.37	133	39.96
May	152	36.50	46	39.39	23	39.46	16	39.78	10	40.95	17	41.13	264	40.80
June	83	38.13	15	38.85	9	39.72	10	39.52	8	40.27	6	42.20	131	41.59
July	38	38.92	2	36.49	2	45.38	4	37.09	--	--	3	43.90	49	42.83
August	28	35.02	8	37.92	1	42.09	4	41.17	2	43.44	4	41.42	47	41.44
September	16	40.08	5	38.54	1	34.44	6	38.39	13	38.58	7	44.78	48	42.43
October	55	43.33	28	45.25	11	44.43	18	46.54	9	47.48	6	46.50	127	46.47
November	156	45.73	31	43.53	18	45.59	12	46.56	2	46.25	1	47.09	220	46.06
December	10	34.83	2	35.12	1	12.00[a]	--	--	2	52.51	--	--	15	46.59
January	8	46.59	2	50.67	1	40.51	1	49.51	1	39.47	--	--	13	44.78
February	7	41.28	2	50.87	--	--	--	--	1	42.98	2	53.70	12	51.74
March	83	47.25	23	49.50	9	49.77	15	49.80	7	51.19	--	--	137	50.20
Tot/Avg.	743	40.61	174	42.38	79	42.49	89	43.73	57	42.63	54	42.98	1196	42.85
						1957								
April	144	48.19	15	50.94	9	50.24	11	49.44	7	53.71	11	56.06	197	54.65
May	162	51.42	43	51.89	19	51.52	17	51.51	13	54.75	21	55.05	275	54.54
June	64	51.34	12	49.80	7	52.96	9	54.24	7	55.38	5	53.89	104	54.13
July	25	49.85	--	--	1	58.46	--	--	2	54.49	2	52.91	30	52.98
August	18	46.97	2	40.69	4	45.35	1	30.53	1	54.97	1	59.65	27	57.44
September	11	54.81	3	48.38	2	58.20	2	55.68	1	51.66	--	--	19	53.95
October	1	18.00[a]	--	--	--	--	--	--	--	--	--	--	1	18.00[a]
November	4	46.88	--	--	--	--	--	--	--	--	--	--	4	46.88
December	4	40.98	--	--	--	--	--	--	--	--	--	--	4	40.98
January	163	44.13	22	43.46	23	44.00	4	46.30	--	--	--	--	212	44.24
February	1	53.09	--	--	--	--	--	--	1	39.80	--	--	2	40.08
March	11	35.69	1	39.00	--	--	1	32.17	--	--	--	--	13	34.45
Tot/Avg.	608	48.29	98	49.09	65	49.04	45	50.44	32	54.21	40	55.02	888	54.01

[a]All or large portion are offsorts.

wool is given a 1 percent deduction for tags, one-half price for crutchings, one-third off for black, murrain, and buck wool, and from 2 to 8 cents off per grease pound for burry and seedy wool. These are the only so-called "costs" that the producer must incur when selling on an ungraded basis. The expenses of handling, grading, storing, and shipping the wool are assumed by the buyer who is handling the wool.

On the other hand, producers selling wool on a graded basis usually incur costs of handling, grading, storing, and shipping wool to concentration points and wool manufacturing areas. These services are usually performed by cooperatives and other wool buyers on a commission basis. Producers incur these costs in the hope that uniform lots of wool will bring higher prices which will more than offset the additional costs.

If the costs of carrying out these functions are not covered by increased prices, producers would be better off to sell on an ungraded basis and let the buyer stand these added charges. Of course, buyers handling a large volume of wool may be able to reduce costs. For this reason most graded wool is handled through cooperatives which can take advantage of carload rates and other large scale economy operations to reduce costs of selling graded wool over what small producers might incur.

Marketing charges on graded wool of most buyers vary with size of clip and length of storage. Rates charged by cooperative marketing associations were representative of all buying firms during the period of this study. Clips of less than 2,000 pounds were generally charged 2.25 cents per pound for grading, while clips of more than 2,000 pounds were charged 1.5 cents per pound. Handling charges were generally 2.25

cents per pound for clips smaller than 5,000 pounds while clips larger than 5,000 pounds were charged 1.5 cents per pound. Commission charges were not listed separately on any sales but a 1 cent commission was included in the handling charge of most firms. Storage rates were 9 cents per hundredweight per month or about 1 cent per pound per year. Freight rates, usually figured from Utah to Boston, were 3.35 cents per pound in 1956 but raised to 3.70 cents per pound in 1957. The trucking charge was generally .03 cent per pound.[1]

Of the firms who listed marketing charges, not all listed each of the costs mentioned. Some buyers charged the producer for freight only, while others assessed a handling charge or some combination of the charges. For this reason comparison of total charges made by different buyers would be of little value. However, since cooperatives handled over 97 percent of the graded sales in both years, the breakdown of their total marketing charges is presented. Producers selling wool through a cooperative are often charged more than the actual cost of handling their wool. Any excess is later refunded as patronage dividends. The refund to producers selling through the Utah Wool Marketing Association, for example, has averaged approximately one-half cent per pound per year over a period of several years. This amount is not guaranteed and therefore is neither deducted from the total marketing charges presented below nor added to the net price of wool sold through cooperatives.

The average marketing charge of 339 graded sales in 1956 was 7.12 cents per pound. The total marketing bill was made up of the following charges:

[1]The trucking charge was for transporting wool from one warehouse to another or from a railroad siding to a warehouse.

Handling	1.77	cents	per	pound
Grading	1.52	"	"	"
Storage	.42	"	"	"
Freight	3.35	"	"	"
Trucking	.03	"	"	"
Total	7.12	"	"	"

The average marketing charge of 240 graded sales in 1957 was 8.5 cents per pound. No trucking charges were listed by cooperatives in 1957; the increase was due to longer storage, increased freight rates, and the processing of a higher percent of smaller clips which do not get reduced cost rates for handling and grading. The 1957 bill was composed of the following charges:

Handling	2.13	cents	per	pound
Grading	1.98	"	"	"
Storage	.69	"	"	"
Freight	3.70	"	"	"
Total	8.50	"	"	"

The marketing costs of selling ungraded wool are usually determined as a percent of the selling price or of the gross weight. A 1 percent deduction without payment for offsorts represents 0.40 cents deduction per pound when the gross price is 40 cents per pound. It represents a 0.50 cent and 0.60 cent deduction per pound when the gross selling price is 50 cents and 60 cents per pound, respectively.

When one-third is taken off for buck and black wool it represents 13.3, 16.6, and 20.0 cents deduction per pound when the gross price is 40, 50, and 60 cents, respectively.

The meaningful price to the producer is the net price since this price reflects marketing charge deductions. Therefore, in comparing prices for graded and ungraded wool it is important to use the average net price per pound received as has been done in this study.

A simplified illustration may clarify this point. Assume two producers each have 1,000 pounds of wool of equal quality to sell either graded or ungraded. The one selling ungraded stands a 1 percent weight deduction and receives 50 cents per pound or $495.00 net proceeds which is a net weighted price of 49.50 cents per pound. Assume the producer selling graded wool receives a gross price of 70 cents per pound for 400 pounds of fine wool, 55 cents per pound for 540 pounds of medium wool and 30 cents per pound for 60 pounds of offsorts. If marketing charges against the graded wool are 10 cents per pound the net prices become 60, 45, and 20 cents, respectively. The net proceeds received by the producer in this case would be $240.00 for fine, $243.00 for medium, and $12.00 for offsorts, or a total of $495.00 which is also an average net weighted price of 49.50 cents per pound. The two net prices of 49.50 cents should be used by the producers in making comparisons and not the 50 cents for ungraded or 70 cents for graded wool.

In making a comparison of graded and ungraded wool it is necessary to assume, on the average, comparable quality of wool clips. This assumption was used in the preceding analysis, since records were not available to determine the quality of ungraded wool in Utah.

Quality of Utah Wool

The quality of wool is an important determinant of prices received by producers. When wool is sold on an ungraded basis the buyer estimates the quality of the wool. However, when wool is sold on a graded basis an experienced grader determines the quality of each fleece individually. The main factors used to determine quality are fineness, length, and

color of the wool. Strength, crimp, softness, and uniformity also influence the value and utility of wool.

Measures of fineness refer to the blood grade of the wool and are designated as: fine 1/2 blood, 3/8 blood, 1/4 blood, low 1/4 blood, and common or braid. Also designated as reject grades or types of wool, although not determined by fineness are: tags, crutchings, black, and burry wool.[1]

The classification by length is indicated by the type of staple. The three types of staple are: combing or staple, French combing, and clothing. The color of wool is designated as choice, bright, average or dark.

All combinations of grade, staple, and color were listed on graded sales in Utah during the years used in this study. Staple was not always listed in 1956 and only grade and color were listed in 1957. Grade was the only quality factor listed consistently during the two years, so it alone was considered in comparing the quality of 1956 and 1957 wool.

Percent of grades in area studied

The results of the grade classification for the seven sample counties during 1956 and 1957 are presented in Table 12.[2] The 1956 classification of graded wool shows that 17.1 percent of the wool graded fine, 20.1 percent graded 1/2 blood, and 16.5 percent graded 3/8 blood. the 1957 data were quite different. Of the wool sold on a graded basis

[1]Wool may be placed in a reject grade because of dark color and excessive foreign material which causes high shrinkage.

[2]Similar 1956 data for the entire state are summarized in Appendix Table 21.

Table 12. Quantity sold and net price per pound by grade of wool, selected Utah counties, 1956 and 1957 marketing years

Grade of wool	Weight sold (pounds)	Net proceeds (dollars)	Avg. price (cents)	Percent of total weight
		1956		
Fine	100,699	40,193.54	39.91	17.1
1/2 blood	118,284	53,225.46	45.00	20.1
3/8 blood	97,022	45,051.39	46.43	16.5
1/4 blood	63,425	30,158.98	47.55	10.8
Low 1/4 blood	16,430	7,345.48	44.71	2.8
Common & braid	884	418.00	47.29	0.1
Black	14,117	5,065.62	35.88	2.4
Tags	8,522	981.05	11.51	1.4
Crutchings	6,951	1,410.98	20.30	1.2
Burry	63,149	26,496.69	41.96	10.7
Other	99,889	38,873.92	38.92	16.9
Tot/Avg.	589,372	249,221.11	42.29	100.0
		1957		
Fine	5,215	3,153.13	60.46	4.7
1/2 blood	16,099	8,654.14	53.76	14.6
3/8 blood	21,671	10,527.94	48.58	19.6
1/4 blood	2,501	1,457.28	58.27	2.3
Black	5,946	2,642.39	44.44	5.4
Tags	1,353	213.15	15.75	1.2
Crutchings	2,226	481.04	21.61	2.0
Burry	20,764	21,923.69	43.19	46.0
Other[a]	4,575	1,876.99	41.03	4.2
Tot/Avg.	110,350	50,929.75	46.15	100.0

[a]Includes a few sales which did not indicate grade although the wool was graded and other types of wool such as buck wool, dead or murrain wool, and grades not common to the wool industry as a whole.

in 1957 only 4.7 percent graded fine, 14.6 percent graded 1/2 blood, and 19.6 percent graded 3/8 blood. The large decrease in the percent of fine wool sold in 1957 is probably caused by two main factors. First, cooperatives held over most of their 1957 fine wool until the 1958 marketing year. Secondly, a large percent of 1957 graded wool was made up of burry wool, part of which may have graded fine had the actual blood grade been determined (Table 12).

The 1956 records more nearly approximate the actual quality of Utah wool because most of the wool produced in 1956 was sold during the same year. The exact amount of Utah wool held over in 1957 is not known, but the sales records in some counties show that less than 50 percent of the 1957 Utah wool consigned to cooperatives was sold during the 1957 marketing year. The remainder was held until 1958. This hold-over of wool accounts for part of the large poundage decrease in graded wool sold in 1957.

Price of various grades

Observation of the price data in Table 12 indicates an unusual situation with graded wool in 1956. During that year 1/4 blood wool brought a higher price than fine wool. Price records from principal wool markets in 1956 indicate that this was not a general price situation. A possible explanation for this unusual situation is that Utah fine wools may have been sold early in 1956 when the price was low relative to later periods, and coarser wools may have been sold after prices had risen.[1] Prices of the four main grades ranged from a low of 39.91 cents for fine

[1]As discussed previously, the actual selling date of each grade was not available.

wool to a high of 47.55 cents per grease pound for 1/4 blood wool. Price data for graded wool sales in 1957 are more in line with normal price differentials among grades. Average prices for the four main grades ranged from a high of 60.46 cents for fine wool to a low of 48.58 cents per pound for 3/8 blood wool.

Percent of the four main grades by county

The quality of Utah wool varies widely throughout the state (Table 13). The percentage of the four main grades by county in 1956 indicates that sheep in counties in the southern part of Utah, Kane and Washington produce a high percentage of fine and 1/2 blood wool. Sheep in areas in central Utah, Millard, Salt Lake and Utah Counties produce mainly 1/2 and 3/8 blood wool. Sheep in Cache and Duchesne Counties in the northern and eastern part of the state produce mainly 3/8 and 1/4 blood wool.[1]

As previously mentioned, the 1957 data do not accurately reflect the actual grades of wool by county since some of the wool produced in 1957 was held over for sale during 1958. For instance, none of the fine nor 1/4 blood wool produced in Cache County in 1957 was sold during that year.

Price of the four main grades by county

Average prices paid in 1956 for the four main grades of wool varied widely between counties (Table 13). The price of fine wool exceeded all other grades only in Cache and Salt Lake Counties. In Millard County the price of fine wool exceeded the price of 1/4 blood wool, but was

[1]Similar 1956 data for the entire state are summarized in Appendix Table 22.

Table 13. Proportion of weight and net price per pound by grade of wool by county, selected Utah counties, 1956 and 1957 marketing years

County	Grade of wool: Fine		1/2 blood		3/8 blood		1/4 blood		Other	
	Percent of tot. wt.	Avg. price (cents)	Percent of tot. wt.	Avg. price (cents)	Percent of tot. wt.	Avg. price (cents)	Percent of tot. wt.	Avg. price (cents)	Percent of tot. wt.	Avg. price (cents)
					1956					
Cache	4.8	53.19	7.6	52.64	22.8	49.83	35.4	51.04	29.4	41.53
Duchesne	11.1	43.84	12.4	46.36	16.6	45.66	13.6	46.79	46.3	39.42
Kane	30.5	33.94	18.3	37.94	3.2	42.42	0.9	40.81	47.1	36.65
Millard	19.2	47.00	43.4	49.77	17.8	48.57	6.6	45.89	31.0	32.80
Salt Lake	13.6	46.78	29.8	45.96	29.1	45.15	9.6	43.53	17.9	37.65
Utah	9.6	46.22	17.5	46.57	25.2	46.84	15.7	47.92	32.0	40.34
Washington	31.7	34.31	20.4	37.33	4.3	41.11	1.4	40.85	42.2	37.01
Tot/Avg.	17.1	39.91	20.1	45.00	16.5	46.43	10.8	47.55	35.5	38.39
					1957					
Cache	--	--	23.2	49.83	55.8	44.57	--	--	21.0	36.03
Duchesne	1.9	52.20	9.4	49.45	13.6	47.88	--	--	75.1	42.82
Kane	12.3	57.90	20.3	55.17	3.0	54.14	--	--	64.4	34.69
Millard	4.5	65.93	24.5	58.12	17.7	56.08	11.9	53.69	41.4	43.34
Salt Lake	5.2	65.74	0.8	52.58	24.4	52.73	0.2	61.00	69.4	41.42
Utah	16.4	63.52	27.2	60.64	15.1	58.54	11.2	58.99	30.1	38.56
Washington	14.0	57.45	21.0	57.18	25.5	53.08	8.8	52.22	30.7	38.01
Tot/Avg.	4.7	60.46	14.6	53.76	19.6	48.58	2.3	58.27	58.8	41.84

lower than 1/2 and 3/8 blood wool. In the other four counties fine wool brought the lowest price of the four main grades.

The highest average net price paid in 1956 was 53.19 cents for fine wool in Cache County. The lowest average price paid was also for fine wool. An average net price of 33.94 cents per pound was received in 1956 for fine wool in Kane County. Fine wools from southern Utah often bring lower prices due to the presence of more seeds, sand, and burrs in comparison to wools from northern Utah.

Prices by county in 1957 indicate the more normal condition of higher prices for fine wool in each county. The highest average net price paid in 1957 was 65.93 cents per pound for fine wool in Millard County. The lowest average price of 44.57 cents was for 3/8 blood wool in Cache County.

Shrinkage of Utah wools

Price variations between counties for the same grade indicate that wool buyers and manufacturers do not determine prices by fineness and length alone. Other important factors considered are shrinkage, amount of foreign matter, condition, and color of the wool. All of these factors were not listed on the sales invoices for graded wool in either year. However, the percent of shrinkage on some grades was listed (Table 14).[1]

It was noted that, in general, wool from the southern counties (Kane and Washington) tended to shrink heavier than wool of the same grade from central and northern counties. For example, choice, 1/2, staple wool from Kane and Washington Counties shrank as high as 56.3

[1]Shrinkage is the weight of impurities such as yolk, dirt, tags, and paint which are lost in the wool scouring process.

Table 14. Shrinkage of wool by color, grade, and length, selected Utah counties, 1956 and 1957 marketing years[a]

Color, grade, length	County							
	Cache	Duchesne	Kane	Millard	Salt Lake	Utah	Washington	Range
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
				1956				
Choice, fine, staple	--	56.7	53.9	53.4-53.9	53.4	53.4-53.9	--	53.4-56.7
Bright, fine, staple	--	56.7	63.4-65.3	63.4	63.4	63.4	62.7-65.3	56.7-65.3
Average, fine, staple	--	--	66.7-69.0	66.7	--	66.7	--	66.7-69.0
Choice, fine, clothing	62.3	62.3	60.5	60.5	62.3	60.5-62.3	--	60.5-62.3
Bright, fine, clothing	62.3	--	64.3-67.6	64.3	--	64.3	66.7	62.3-67.6
Average, fine, clothing	--	--	71.5	--	--	--	71.5	71.5
Choice, 1/2, staple	52.9	54.5	54.9-56.3	52.9-54.9	54.9	52.9-54.9	56.3	52.9-56.3
Bright, 1/2, staple	52.9	58.4	60.9-62.5	57.5-60.9	57.5-60.9	52.9-60.9	61.1-63.8	52.9-63.8
Average, 1/2, staple	--	--	64.9-66.4	--	--	64.9	66.4	64.9-66.4
Bright, 3/8, staple	--	--	--	56.2	56.2	56.2	56.5-57.5	56.2-57.5
Choice, 1/4, staple	46.4	46.7	46.7	46.7	46.7	46.4-46.7	--	46.4-46.7
Bright, 1/4, staple	46.4	46.6	--	54.0	54.0	46.4-54.0	--	46.4-54.0
Choice, 1/4, clothing	48.5	45.5	--	55.7	49.5-55.7	47.6-55.7	--	45.5-55.7
Bright, 1/4, clothing	48.5	--	57.8	57.8	--	57.8	--	48.5-57.8
Medium, burry	43.7-43.9	53.6	--	53.9	--	53.9	--	43.7-53.9
				1957				
Bright, fine	--	--	62.7	59.2	59.2	59.2	62.7	59.2-62.7
Choice, 1/2	52.3	--	52.3	51.6	51.6-52.3	51.6	52.3	51.6-52.3
Bright, 1/2	--	--	--	57.0	--	57.0	57.0	57.0
Choice, 3/8	50.5	--	--	--	50.5	--	--	50.5
Bright, 3/8	52.5	52.5	--	52.5	52.5	--	--	52.5
Fine, burry	58.2	58.2	--	--	--	--	--	58.2

[a]Wool lengths were not available for the 1957 marketing year.

percent, while the shrinkage of like wool from the other five counties ranged from 52.9 to 54.9 percent.

The range of shrinkage of all Utah wool in 1956 was from a low of 43.7 to a high of 71.5 percent. In terms of yield, this means that grease wool yielded from 56.3 to 28.5 percent clean wool.

Table 14 indicates that finer wools generally shrink heavier than coarser wools. Disregarding color and length, the shrinkage for fine wool ranged from 53.4 to 71.5 percent while shrinkage for 1/4 blood wool ranged from 45.5 to 57.8 percent.

In several cases, shrinkage of a grade of wool was found to be exactly the same in several counties. The grading procedures of cooperatives may explain this consistency between counties. Cooperatives often put wool of like characteristics (fineness, length, and color) and similar shrinkage together. The shrinkage is usually determined for the entire group rather than for each individual producer. It is doubtful that the shrinkage would be exactly the same if determined for each producer or even each county separately. Determining only one shrinkage for all wool of the same grade has the disadvantage of penalizing the producer of light shrinking wool while subsidizing the producer of heavy shrinking wool. Cooperatives attempt to avoid this to some extent by grading extra heavy shrinking wools into separate lines.

Relation of quality to size of clip

The percent of grades in various size clips is presented in Table 15. In general, as the size of the clip increased, the quality of the wool improved. Larger clips generally contain a larger percent of fine and

Table 15. Comparison of grade of wool by size of clip, selected Utah counties, 1956 and 1957 marketing years

Size of clip	Grade of wool											
	Fine	1/2 blood	3/8 blood	1/4 blood	Low 1/4 blood	Common	Black	Tags	Crutch	Burry	Other	Total
(pounds)	- - - - - - - - - - - -					Percent	- - - - - - - - - - - -					
						1956						
0-500	5.8	7.5	17.9	22.1	6.2	0.8	2.0	0.5	1.3	30.3	5.6	100
500-1,000	6.2	9.0	14.8	13.1	4.0	0.6	2.2	1.3	1.1	42.0	5.7	100
1,000-2,000	4.4	7.3	21.4	22.4	4.5	0.4	4.0	1.3	1.3	28.9	4.1	100
2,000-5,000	8.9	13.6	22.8	14.3	2.6	0.1	1.6	0.9	1.4	22.6	11.2	100
5,000-20,000	29.6	19.9	12.8	6.0	1.4	--	1.9	1.6	0.8	1.5	4.5	100
20,000 & over	15.6	30.4	16.5	8.7	2.9	--	2.9	1.8	1.5	0.2	19.5	100
Total	17.1	20.1	16.5	10.8	2.8	0.1	2.4	1.4	1.2	10.7	16.9	100
						1957[a]						
0-500	3.4	14.0	26.1	0.9	--	--	6.2	0.4	2.7	44.3	2.0	100
500-1,000	1.8	9.1	12.9	1.2	--	--	10.5	1.2	2.1	59.6	1.6	100
1,000-2,000	1.8	9.8	20.6	2.8	--	--	5.0	1.4	1.8	56.4	0.4	100
2,000-5,000	7.0	23.3	21.1	5.2	--	--	2.0	--	1.2	32.7	7.5	100
5,000-20,000	25.4	33.6	3.3	0.6	--	--	--	6.5	2.2	--	28.4	100
Total	4.7	14.6	19.6	2.3	--	--	5.4	1.2	2.0	46.0	4.2	100

[a]There were no clips 20,000 pounds or over sold in 1957.

1/2 blood wool. Smaller size clips generally contain a larger percent of 3/8 and 1/4 blood wools.

Limitations of the 1957 data should be kept in mind in considering Table 15. That is, since a large percent of the wool produced in 1957 was held until 1958, the percentage of each grade may not show an accurate picture. For example, clips from 2,000 to 5,000 pounds show no tags in 1957. These clips may normally contain tags, but were probably not sold until the following year and therefore not recorded.

In 1956 when virtually all Utah wool produced was sold during the same year, the average amount of tags was 1.4 percent. The amount of tags in different size clips ranged from 0.5 percent for clips under 500 pounds to 1.8 percent for clips over 20,000 pounds.

SUMMARY AND CONCLUSIONS

The purpose of this study was to (a) investigate wool buying practices in Utah, (b) determine the cost and net returns of marketing wool graded and ungraded, (c) investigate producer marketing methods during 1956 and 1957, and (d) investigate the quality of Utah wool.

Data for the study were obtained from a survey of Utah wool buyers in 1956 and from wool producers' records on file in A.S.C. offices in seven sample counties. The data from A.S.C. records covered the 1956 marketing year when wool prices generally rose throughout the year, and the 1957 marketing year when wool prices generally declined. The study areas consisted of the following counties in Utah: Cache, Duchesne, Kane, Millard, Salt Lake, Utah, and Washington.

Market Channels and Wool Buying Practices in Utah

1. Independent buyers constituted the largest market outlet by buying more than 60 percent of the wool in the seven-county sample during the two-year period. The order of importance of other buyers by the volume of wool handled were: manufacturer buyers, cooperatives, and hide and fur dealers.
2. Highest average net prices for the seven-county sample were paid by independent buyers in both years. In 1956 manufacturer buyers, cooperatives, and hide and fur dealers (in that order) paid the next

highest net prices. In 1957 the order of importance of the hide and fur dealers and cooperatives was reversed.

3. Net prices paid by different buyers varied among counties. In 1956 growers in four counties received highest average net prices from independent buyers; growers in two counties received highest prices from manufacturer buyers; and growers in one county received highest prices from cooperatives. In 1957 growers in five counties were paid highest average net prices by independent buyers; growers in one county were paid highest prices by manufacturer buyers; while growers in the remaining county received highest average net prices by selling through cooperatives.

4. Average net prices paid by buyers varied widely by type of buyer from month to month. In 1956 hide and fur dealers consistently paid the lowest average monthly prices.

Producers with small clips in particular may find other benefits of selling to local hide and fur dealers such as availability of a buyer at all times and a lower cost of transporting wool to a local buyer which may partially offset the low prices received.

Manufacturer buyers paid highest average prices during the first four months (April to July) of the 1956 marketing year and the following February; cooperatives paid highest average prices in August, while independent buyers paid highest prices from September through January and the following March.

The pattern of highest net monthly wool prices in 1956 was not consistently established by the same type buyers during similar

time periods in the following year. In 1957 independent buyers paid highest prices from April through July and during November and the following March. Manufacturer buyers paid highest prices in August, December, and February, while cooperatives paid highest prices in September and the following January.

5. The average net price paid per pound by all buyers combined generally increased as the size of the clip increased. Also the quality of the wool generally improved as the size of the clip increased. This, along with the increased bargaining power which producers with large clips often have, are probable reasons why the average net price per pound generally increased as the size of the clip increased.

In both 1956 and 1957 the greater percentage of Utah wool growers were raising only small farm flocks. More than 60 percent of the sales in both years were under 500 pounds of wool. A clip of 500 pounds represents about 50 head of shorn sheep at the 1956 average of 9.9 pounds of wool per sheep.

While producers with small flocks of sheep made up the largest percent of wool growers, producers with large scale operations accounted for over 65 percent of the pounds of wool grown in the sample areas.

6. Every type of buyer purchased wool on an ungraded basis during both years. But in 1956 only growers selling through cooperatives and independent buyers were paid on a graded basis. In 1957 growers selling through cooperatives were the only producers who were paid on a graded basis.

Because of the varying prices paid by different wool buyers, a producer would be wise to investigate prices of several buyers when he decides to sell his wool. Independent buyers purchased the largest quantity and paid highest average net prices during both years; however, one should not conclude from this that all wool should be sold to independent buyers. Several factors affect the prices paid by buyers and in some cases highest net prices were paid by other type buyers. Location or county, time of sale, size of clip, quality of wool, marketing costs, and whether the wool was sold on a graded or ungraded basis were factors affecting net prices paid by buyers. Wool growers should be aware of the quality and approximate value of their particular wool and investigate all possible market outlets at the time they decide to sell.

Specific Costs of Marketing Utah Wool

1. A discounted price or a deduction was levied against most graded and ungraded wool sales during both years. In 1956 and 1957, respectively, 85.6 and 86.3 percent of the total sales had some type of deduction for offsorts.
2. The normal price deductions or "costs" of marketing ungraded wool include 1 percent off for tags, half price for crutchings, one-third off for black wool, one-third off for buck wool, and a range of 2 to 8 cents off per grease pound for burry and seedy wool.
3. Cost of marketing graded wool varied from 2.5 cents per pound, which covered only grading and handling, to as high as 8.5 cents per pound when freight, storage, and other miscellaneous costs were also included. The average marketing charge of 339 graded

sales sold through cooperatives in 1956 was 7.12 cents per pound. The average charge of 240 graded sales in 1957 was 8.5 cents per pound. If the cost of performing these additional marketing functions are not covered by increased prices wool growers would increase net returns by selling on an ungraded basis.

Price Relationships of Graded and Ungraded Wools

1. In 1956 when prices were rising four of the seven sample counties received higher net prices by selling wool on a graded basis and one county showed essentially the same price for graded and ungraded wools. In 1957 when prices were falling, five of the seven counties received higher prices by selling wool on an ungraded basis. However, on a weighted average for all seven counties ungraded wool brought 0.83 and 8.22 cents more per pound than graded wool in 1956 and 1957, respectively. This indicates that on the average the costs of marketing graded wool were not covered by the gross price differentials between graded and ungraded wools during either year.

Average prices for a county or state often conceal many facts. On an individual sales basis a greater percent of graded sales brought higher net prices per pound than ungraded sales in 1956, while the reverse was true in 1957. This suggests that an individual producer would have had a greater chance of obtaining a higher price for his wool by selling on a graded basis in 1956 and on an ungraded basis in 1957.

2. Semi-monthly price changes for graded wool were not statistically significant during either year but were highly significant for ungraded wool during both years. This suggests that a producer must accept more uncertainty when selling on an ungraded basis. In other words, if selling on an ungraded basis, his prices may rise faster but may also fall faster than if selling on a graded basis. However, this conclusion may be somewhat invalid due to differences in the time of sale of graded and ungraded wools. This factor could not be completely removed because the time of sale of each grade of graded wool could not be determined accurately.

Producer Marketing Methods during a Period of Rising and Falling Prices

1. The quantity of wool sold in 1957 declined 29.3 percent from the 1956 level. However, other sources indicated that production was about the same during both years. Due to low prices late in 1957 more than 50 percent of the wool produced in some counties was held until the 1958 marketing year. About 80 percent (81.3) less wool was sold on a graded basis in 1957 when prices were declining than in 1956 when prices were rising.
2. The greatest quantity of wool sold during a half-month period occurred between May 1 and 15 of both years. This time corresponds closely to the shearing time in most parts of the state. There was more tendency to sell late in 1956 when prices were rising and to sell early in 1957 when prices were declining. Although the total pounds of wool sold in the sample area in 1957 was over one million pounds less than

in 1956, the total pounds sold before August 15, 1957 (when prices started to drop) was greater than that sold in 1956 during the same period. In 1956 only 61.9 percent of the wool was sold before August 15, while 95.1 percent of the wool marketed in 1957 was sold by the same date.

Quality of Utah Wool

1. The quality of wool was found to vary throughout the state. Sheep in counties in the southern part of the state produce a high percentage of fine and 1/2 blood wool. Sheep from areas in central Utah produce mainly 1/2 and 3/8 blood wool Sheep in eastern and northern parts of the state produce a high percent of 3/8 and 1/4 blood wool.
2. The price of finer wools usually exceeds that of coarser wools, but the reverse was found in 1956. Coarser wools may have been sold later than the finer wools, and prices had risen considerably as the year progressed. In 1957 the price of finer wools was generally higher than the price of coarser wools.
3. The range of shrinkage for Utah wool varied from a low of 43.7 to a high of 71.5 percent in 1956. Shrinkage was generally greater in finer wools than in coarser wools. In general, wool from Kane and Washington Counties tended to shrink heavier than wool of the same grade from central and northern counties. Wool from the southern area is often characterized by having a higher percent of seedy, sandy, and burry fleeces which contribute to the heavy shrinkage.

Recommendations for Further Study

1. Predictions of future prices and market behavior on the basis of this study would be questionable because of the limited time period covered in this analysis. Further study on wool marketing in Utah covering a longer period of time would provide a useful basis for predictive purposes.
2. A study of the comparative costs of farm grading and commercial grading of Utah wool seems desirable. Farm grading of wool may provide a means of lowering grading costs and increasing net returns to Utah wool growers.

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APPENDIX

Table 16. Production, price, and value of Utah wool by years, 1924-59

Year	Sheep shorn	Wool per fleece	Total wool shorn	Average farm price per pound	Farm cash receipts
	1,000 head	Pounds	1,000 pounds	Cents	1,000 dollars
1924	2,165	8.3	17,970	38	6,829
1925	2,144	8.6	18,438	40	7,375
1926	2,208	9.1	20,093	34	6,832
1927	2,350	8.9	20,915	30	6,274
1928	2,480	9.3	23,064	32	7,380
1929	2,430	8.5	20,655	29	5,990
1930	2,600	9.4	24,440	19	4,644
1931	2,692	9.0	24,228	13	3,150
1932	2,355	8.0	18,840	7	1,319
1933	2,315	8.6	19,909	19	3,783
1934	2,370	8.8	20,856	20	4,171
1935	2,250	8.5	19,125	17	3,251
1936	2,280	8.7	19,836	25	4,959
1937	2,075	8.6	17,845	31	5,532
1938	2,096	8.9	18,654	19	3,544
1939	2,002	8.7	17,417	21	3,658
1940	1,990	9.3	18,507	27	4,997
1941	1,990	9.0	17,910	32	5,731
1942	2,009	9.0	18,081	38	6,871
1943	1,831	9.2	16,845	38	6,401
1944	1,729	8.6	14,869	41	6,096
1945	1,581	9.0	14,229	39	5,549
1946	1,502	9.3	13,969	39	5,448
1947	1,337	9.5	12,702	41	5,208
1948	1,322	9.3	12,295	49	6,025
1949	1,228	8.7	10,684	47	5,021
1950	1,180	9.2	10,856	58	6,296
1951	1,252	9.6	12,019	91	10,937
1952	1,313	9.3	12,211	58	7,082
1953	1,326	9.4	12,464	52	6,481
1954	1,300	9.6	12,480	54	6,739
1955	1,300	9.7	12,610	43	5,422
1956	1,287	9.9	12,741	42	5,351
1957	1,223	9.7	11,863	54	6,406
1958	1,211	9.7	11,747	38	4,464

Source: 1924-54 USDA, AMS, State Statistican Office, "Utah Wool and Mohair Production" released March 1, 1955.
1955-58 USDA, AMS, "Wool Production by States," released about February each year.

Table 17. Basic data on wool sales in all counties, Utah, 1956 marketing year

County	No. growers	No. sales	Weight sold	Net proceeds	Average size of sale	Average return per grower	Net price per pound
			(pounds)	(dollars)	(pounds)	(dollars)	(cents)
Beaver	19	20	6,097	2,035.64	305	107	33.39
Box Elder	153	159	451,059	188,826.08	2,837	1,234	41.86
Cache	136	136	191,784	79,896.53	1,410	587	41.66
Carbon	64	71	478,226	180,692.18	6,736	2,823	37.78
Daggett	20	20	62,616	27,203.08	3,131	1,360	43.44
Davis	83	92	358,144	156,123.70	3,904	1,881	43.47
Duchesne	222	234	436,128	174,567.21	1,864	786	40.03
Emery	113	135	159,773	68,644.57	1,184	607	42.96
Garfield	78	85	228,089	84,371.40	2,683	1,082	36.99
Grand	3	3	21,444	7,148.69	7,148	2,383	33.34
Iron	171	241	1,130,676	462,920.02	4,692	2,707	40.94
Juab	63	70	85,173	35,412.02	1,217	562	41.58
Kane	32	46	152,128	57,188.30	3,307	1,787	37.59
Millard	105	118	143,098	61,461.63	1,213	585	42.95
Morgan	22	24	194,401	84,395.73	8,100	3,836	43.41
Piute	29	33	97,693	42,930.11	2,960	1,480	43.94
Rich	95	98	219,523	92,713.60	2,240	976	42.23
Salt Lake	237	296	1,610,455	688,509.03	5,441	2,905	42.75
San Juan	162	180	759,200	298,221.69	4,218	1,841	39.28
Sanpete	363	444	1,579,260	664,437.17	3,557	1,830	42.07
Sevier	164	222	393,014	164,877.08	1,770	1,005	41.95
Summit	104	118	436,242	194,319.55	3,697	1,868	44.54
Tooele	67	70	174,557	72,316.15	2,494	1,079	41.43
Uintah	376	398	964,800	424,584.98	2,424	1,129	44.01
Utah	267	315	1,011,379	463,133.49	3,211	1,735	45.79
Wasatch	77	77	451,471	194,553.70	5,863	2,527	43.09
Washington	42	51	90,509	32,994.20	1,775	786	36.45
Wayne	61	79	235,644	98,650.01	2,983	1,617	41.86
Weber	81	92	422,764	187,051.97	4,595	2,309	44.25
Tot/Avg.	3,409	3,927	12,546,347	5,290,179.51	3,195	1,552	42.17

Table 18. Quantity sold and net price per pound of graded, ungraded, and offsort wools, in all counties, Utah, 1956 marketing year

County	Graded wools			Ungraded wools		Offsort wools	
	Weight sold	Percent of total weight	Avg. price	Weight sold	Avg. price	Weight sold	Avg. price
	(pounds)		(cents)	(pounds)	(cents)	(pounds)	(cents)
Beaver	611	10.0	34.45	5,486	33.27	--	--
Box Elder	46,363	10.3	45.38	403,299	41.50	1,397	31.33
Cache	39,472	20.6	48.20	152,312	39.97	--	--
Carbon	177,365	37.1	39.69	298.697	36.73	2,164	26.66
Daggett	29,670	47.4	46.17	32.946	40.99	--	--
Davis	24,592	6.8	42.54	334,545	43.54	7	25.00
Duchesne	141,483	32.4	42.81	294,421	38.71	224	9.50
Emery	42,127	26.4	42.13	117,646	43.26	--	--
Garfield	150,653	66.1	38.39	76.954	34.35	482	20.87
Grand	21,444	100.0	33.34	--	--	--	--
Iron	593,370	52.5	39.13	535,305	42.98	1,992	34.44
Juab	7,720	9.1	43.76	77,398	41.38	55	11.73
Kane	114,857	75.5	36.28	37,271	41.64	--	--
Millard	64,106	44.8	46.57	78,992	40.02	--	--
Morgan	118,488	60.9	41.64	75,913	46.18	--	--
Piute	--	0.0	--	97.693	43.94	--	--
Rich	35,832	16.3	44.89	183,691	41.72	--	--
Salt Lake	59,034	3.7	44.11	1,533,888	42.99	17,533	17.60
San Juan	284,195	37.4	39.04	469,853	39.67	5,152	17.15
Sanpete	190,169	12.0	42.05	1,389,091	42.08	--	--
Sevier	76,479	19.5	43.49	314,139	41.81	2,396	11.31
Summit	5,962	1.4	48.23	428,974	44.58	1,306	17.40
Tooele	41,137	23.6	43.13	133,420	40.90	--	--
Uintah	516,609	53.5	45.86	448,191	41.87	--	--
Utah	118,805	11.7	44.82	889,952	45.99	2,622	22.88
Wasatch	165,170	36.6	46.14	286.292	41.34	--	--
Washington	51,615	57.0	36.45	38,894	36.46	--	--
Wayne	23,847	10.1	36.87	211,399	42.48	398	16.38
Weber	14,189	3.4	41.43	408,575	44.34	--	--
Tot/Avg.	3,155,382	25.1	41.38	9,355,237	42.36	35,728	19.49

Table 19. Semi-monthly net prices and quantities of graded, ungraded, and offsort wools, selected counties, 1956 marketing year

Time of sale	Graded wools		Ungraded wools		Offsorts		Total	Avg.[a]
	Weight sold	Avg. price	Weight sold	Avg. price	Weight sold	Avg. price	weight	price
(date)	(pounds)	(cents)	(pounds)	(cents)	(pounds)	(cents)	(pounds)	(cents)
April 1-15	--	--	10,008	36.92	14,581	17.48	24,509	36.92
April 16-30	--	--	366,179	40.94	--	--	366,179	40.94
May 1-15	--	--	551,993	39.90	99	25.00	552,092	39.90
May 16-31	336	45.59	417.693	41.99	177	15.00	418,206	41.99
June 1-15	--	--	328,935	41.40	2,017	18.44	330,952	41.40
June 16-30	27,765	42.54	226.683	41.95	821	45.58	255,269	42.01
July 1-15	--	--	52,926	40.80	--	--	52,926	40.80
July 16-31	--	--	74,074	44.28	--	--	74,074	44.28
August 1-15	--	--	176,496	41.38	--	--	176,496	41.38
August 16-31	--	--	23,630	41.92	--	--	23,630	41.92
September 1-15	60,651	42.13	151,592	44.91	--	--	212,243	44.12
September 16-30	163,426	36.29	96,625	49.13	--	--	260,051	41.06
October 1-15	56,871	42.75	205,537	47.94	--	--	262,408	46.81
October 16-31	84,296	45.61	34,985	46.01	--	--	119,281	45.73
November 1-15	113,224	47.07	129	40.85	--	--	113,353	47.06
November 16-30	64,133	44.16	11,862	47.49	224	09.50	76,219	44.68
December 1-15	--	--	15,223	51.62	1,542	12.00	16,765	51.62
December 16-31	--	--	872	48.71	836	16.76	1,708	48.71
January 1-15	858	42.24	8,777	41.64	--	--	9,635	41.69
January 16-31	--	--	6,299	49.49	--	--	6,299	49.49
February 1-15	--	--	85,376	53.70	--	--	85,376	53.70
February 16-28	17,548	42.98	2,508	46.32	--	--	20,056	43.40
March 1-15	--	--	37,196	51.67	--	--	37,196	51.67
March 16-31	264	46.02	140,132	49.83	82	17.27	140,478	49.83
Tot/Avg.	589,372	42.29	3,025,730	43.12	20,379	18.19	3,635,481	42.99

[a]Average net price per pound of graded and ungraded wool only.

Table 20. Semi-monthly net prices and quantities of graded, ungraded, and offsort wool, selected counties, 1957 marketing year

Time of sale	Graded wools		Ungraded wools		Offsorts		Total	Avg.[a]
	Weight sold	Avg. price	Weight sold	Avg. price	Weight sold	Avg. price	weight	price
(date)	(pounds)	(cents)	(pounds)	(cents)	(pounds)	(cents)	(pounds)	(cents)
April 1-15	--	--	33,637	50.67	40	23.60	33,677	50.67
April 16-30	--	--	487,320	54.93	--	--	487,302	54.93
May 1-15	--	--	658,304	54.27	81	36.00	658,385	54.27
May 16-31	--	--	420,985	54.98	--	--	420,985	54.98
June 1-15	--	--	166,905	53.54	--	--	166,905	53.54
June 16-30	--	--	168,679	54.71	--	--	168,679	54.71
July 1-15	--	--	314,559	52.10	--	--	314,559	52.10
July 16-31	--	--	53,850	58.13	--	--	53,850	58.13
August 1-15	2,961	42.63	135,741	58.30	--	--	138,702	57.97
August 16-31	5,577	44.62	167	50.00	--	--	5,744	44.77
September 1-15	52	49.65	1,651	47.57	--	--	1,703	47.63
September 16-30	20,589	54.53	73	40.00	--	--	20,662	54.47
October 1-15	--	--	--	--	--	--	--	--
October 16-31	--	--	--	--	244	18.00	244	--
November 1-15	--	--	230	43.62	--	--	230	43.62
November 16-30	--	--	334	49.13	--	--	334	49.13
December 1-15	--	--	165	38.24	--	--	165	38.24
December 16-31	--	--	297	42.51	--	--	297	42.51
January 1-15	14,547	44.02	--	--	--	--	14,547	44.02
January 16-31	66,624	44.31	222	37.74	--	--	66,846	44.29
February 1-15	--	--	9,938	40.08	--	--	9,938	40.08
February 16-28	--	--	--	--	--	--	--	--
March 1-15	--	--	357	39.14	--	--	357	39.14
March 16-31	--	--	4,974	34.12	--	--	4,974	34.12
Tot/Avg.	110,350	46.15	2,458,370	54.37	365	22.61	2,569,085	54.02

[a]Average net price per pound of graded and ungraded wool only.

Table 21. Quantity sold and net price per pound by grade of wool in all counties, Utah, 1956 marketing year

Grade	Weight sold (pounds)	Net proceeds (dollars)	Average price (cents)	Percent of total weight
Fine	711,652	295,110.15	41.47	22.6
1/2 blood	696,885	308,828.72	44.32	22.1
3/8 blood	504,627	228,207.07	45.22	16.0
1/4 blood	198,083	92,191.92	46.54	6.3
Low 1/4 blood	40,991	19,097.77	44.15	1.3
Common and braid	1,263	590.12	46.72	-[a]
Black	53,375	18,999.53	35.60	1.7
Tags	52,583	6,643.70	12.63	1.7
Crutchings	22,579	4,586.55	20.31	0.7
Burry	127,124	52,418.64	41.23	4.0
Other	746,220	295,643.08	39.62	23.6
Tot/Avg.	3,155,382	1,321,317.25	41.88	100.0

[a]Less than 0.1 percent.

Table 22. Net price per pound by grade of wool, by county, in all counties, Utah, 1956 marketing year

County	Grade of wool									
	Fine		1/2 blood		3/8 blood		1/4 blood		Other	
	Percent of tot.wt.	Avg. price (cents)	Percent of tot.wt.	Avg. price (cents)	Percent of tot.wt.	Avg. price (cents)	Percent of tot.wt.	Avg. price (cents)	Percent of tot.wt.	Avg. price (cents)
Beaver	2.0	39.83	13.1	41.15	3.4	49.24	1.6	45.00	79.9	32.37
Box Elder	6.9	47.03	30.2	46.26	37.2	46.72	11.5	45.59	14.2	39.02
Cache	4.8	53.19	7.6	52.64	22.8	49.83	35.4	51.04	29.4	41.53
Carbon	23.3	34.06	15.3	40.76	10.8	42.92	3.9	49.10	46.7	40.63
Daggett	17.9	50.54	33.8	49.16	22.2	46.45	6.0	48.29	20.1	36.30
Davis	42.5	43.24	25.7	47.16	10.1	41.94	7.4	43.16	14.3	32.28
Duchesne	11.1	43.84	12.4	46.36	16.6	45.66	13.6	46.79	46.3	39.42
Emery	16.2	44.71	30.6	46.06	12.6	37.74	3.6	44.10	37.0	39.04
Garfield	15.2	38.90	9.5	40.57	2.8	43.83	1.1	41.66	71.4	37.73
Grand	39.3	35.79	34.9	33.96	20.6	30.93	0.1	35.00	5.1	19.86
Iron	33.4	39.30	15.5	41.06	6.0	44.08	2.3	41.56	42.8	37.47
Juab	20.6	43.79	7.5	45.02	23.4	46.17	23.2	43.57	25.3	41.30
Kane	30.5	33.94	18.3	37.94	3.2	42.42	0.9	40.81	47.1	36.65
Millard	19.2	47.00	43.4	49.77	17.8	48.57	6.6	45.89	13.0	32.80
Morgan	40.2	43.54	26.5	45.01	20.8	36.04	7.2	43.64	5.3	29.48
Piute	--	--	--	--	--	--	--	--	--	--
Rich	6.9	48.53	24.1	45.04	33.2	47.85	15.7	46.18	20.1	37.57
Salt Lake	13.6	46.78	29.8	45.96	29.1	45.15	9.6	43.53	17.9	37.65
San Juan	26.2	41.37	31.4	38.44	10.4	42.15	3.3	41.74	28.7	36.11
Sanpete	25.7	44.76	21.1	43.02	10.6	45.11	2.8	44.43	39.8	38.82
Sevier	43.0	45.52	22.8	44.56	8.7	45.30	1.9	44.83	23.6	37.98
Summit	0.4	54.41	16.2	51.96	38.6	50.36	36.4	47.22	8.4	35.41
Tooele	33.9	43.05	29.8	47.35	14.7	42.00	4.4	43.28	17.2	36.93
Uintah	13.3	47.71	23.5	49.03	30.3	47.04	9.3	48.64	23.6	39.05
Utah	9.6	46.22	17.5	46.57	25.2	46.84	15.7	47.92	32.0	40.34
Wasatch	9.2	45.74	38.2	49.23	28.6	46.80	8.8	47.56	15.2	36.54
Washington	31.7	34.31	20.4	37.33	4.3	41.11	1.4	40.85	42.2	37.01
Wayne	30.5	37.45	22.2	37.35	6.9	40.26	2.2	41.31	38.2	35.25
Weber	8.9	41.59	28.6	39.91	32.7	43.73	15.6	42.06	14.2	38.43
Tot/Avg.	22.6	41.47	22.1	44.32	16.0	45.22	6.3	46.54	33.0	38.02

Recorder_____

RECORD OF WOOL SALE Date_____

State_____ County_____ Schedule No._____ Graded ☐ Ungraded ☐

Wool Production for 1955 ☐ '56 ☐ '57 ☐ Date of sale_____

Grower_____ Address_____

Buying Firm_____ Address_____

Agent_____ Address_____

Packages of wool	Gross shipping weight	Tare	Net shipping wt.
GRADE (If sold ungraded, so indicate)	Net weight: Sold (lbs)	Gross selling	Net selling
TOTAL OR AVERAGE			

SALES PROCEEDS

Tags determined by: 1. Weighing ☐ 2. ___ % of gross weight ☐
3. ___ % of net weight ☐ 4. ___ % of gross sales proceeds ☐

DEDUCTIONS

Item of deduction	Cents per pound
I. Warehouse charge	
___ Month's storage	
Grading	
Coring	
II. Trucking	
Freight	
Insurance	
Other (specify)	
Other (specify)	
Other (specify)	
TOTAL MARKETING DEDUCTIONS	
NET PROCEEDS AFTER MARKETING DEDUCTIONS	

Value upon which incentive payment based: $_____

Figure 5. Schedule used in collecting wool data from county Agricultural Stabilization and Conservation Offices