Journal of Accountancy

Volume 50 | Issue 4 Article 4

10-1930

Accounting Principles of the Cattle Industry

Leon E. Williams

Accounting Principles of the Cattle Industry *

By Leon E. Williams

The principles of the cattle industry are not particularly complicated in theory but are difficult to apply because of the nature of the business and a lack of knowledge of fundamental bookkeeping principles. Cattlemen as a rule do not have a working knowledge of bookkeeping and in fact indicate an aversion to records and accounting in general. I have talked to few cattlemen about questions involving taxes, litigation, who have not prefaced their remarks with the statement that "they do not know anything about books." Subsequent events usually have proved that this statement was entirely correct. It is unusual to find a cattleman maintaining a double-entry set of books, and ordinarily an accountant is lucky if the canceled cheques can be found. Many bookkeepers have attempted to keep the records of a cattle business with complete ignorance as to the nature and methods of operation of the business, and of course the results have been unsatisfactory.

Before discussing accounting principles it is well to review briefly the history, the present condition and the trend of the cattle industry. It is not intended to cover these subjects in a comprehensive manner, but it is hoped to present a few facts which will serve as a background and as a basis for a discussion of accounting principles.

The Lewis and Clark expedition in 1803 opened up a vast territory and although thousands of buffalo were grazing on the plains, apparently it did not occur to the pioneers that the grasses had any value in sustaining domestic cattle. It was nearly a half century after the journey of Lewis and Clark that the forty-niners were crossing the plains and still the wealth of the plains was not recognized. The cow industry was flourishing in Mexico long before the adventurers and miners came on the range. During the closing days of the civil war the cattle industry was introduced into Texas, although no one then realized the possibilities of profit and the future development.

Cattle increased so rapidly that they had at first little value because there was no market for the beef or hides. The means of transportation were mule and pack trains and it was some time

* A paper read by the author at the annual meeting af the American Institute of Accountants, at Colorado Springs, Colorado, September 16, 1930.

before the cattle trails were opened. Land had practically no value and a water hole represented more value than thousands of acres of land. Not long ago land was sold in Texas for three cents an acre and probably within the memory of the present generation, land could have been purchased for six cents an acre.

The cow range proper was not settled entirely by an eastward thrust but came from the north, the west, the northwest and the south as well. Roundups at this time were unnecessary and cattle were collected at water holes, ownership being determined by branding, an invention of the Spaniard early adopted in this country.

After the Civil War transportation facilities were pushed westward and in a short time the cattle trail was opened with the result that the industry was transferred to the north. The trail of the great cattle drives—the long trail—not only spread the cattle industry over the entire west but furnished an outlet for the product. In 1871 over 600,000 cattle crossed the Red River for the northern markets. From this date to about 1885 the long trail continued, the range was open, the cowboy reigned and the calf and beef roundups were an essential part of the industry.

Increased transportation facilities encouraged homesteading and settlement and about 1900 the open range was a thing of the past. Since this date the cattleman has been required to own or lease his land with resulting additional costs of production. The land available for leasing is limited and lease rentals materially reduce the producer's profit. State land can be leased from $.05 to $.12 an acre, which may amount to an annual charge of $3.00 per head. Cattle may range on the forest reserves at an approximate cost of $.50 a head for the season. The cattleman has to face today high labor charges and taxes and pay higher rates of interest for borrowed money than is the case of other business enterprises with a similar amount of capital invested. Serious competitive conditions with Mexico and the Argentine are encountered particularly in canned meats; but the embargo prohibiting the shipment of beef from the Argentine on account of the hoof-and-mouth disease has prevented ruinous competition and has given a protection which the low tariff otherwise would not have accomplished. The export trade is not of great importance and the cattleman today must look to the domestic market for the disposal of his product.

An important factor in marketing conditions is the change in the public's demand for different classes of beef. Baby beef a few years ago was not marketed. Today there is a demand for baby beef. Choice cuts are in demand and it is a problem to dispose of the cheaper cuts.

Cattle by-products are not as valuable as in the past, because cheaper substitutes have been developed.

Today it costs approximately $20.00 to produce a calf and $15.00 to $20.00 a year to run a steer. Considering present-day market prices, it does not take a great deal of imagination to determine that the problems of the cattle business, operated as a single enterprise, are serious and present many operating difficulties.

Without further consideration of economic features it may be pointed out that the remaining large cattle operators are relatively few. Generally, there has been a tendency to eliminate the small business. The reverse is true in the cattle industry—the large operators are being eliminated and the production of cattle is developing as a side line of the dairy business or as a branch or department of the farm.

This outline indicates that the form of operation and organization of cattle ventures may vary greatly in different localities and according to the land owned or leased and the capital invested. As a result different accounting problems are encountered.

The following classification of cattle may be used for the purpose of this discussion:

I. Range cattle. Large operations with possibly 100,000 acres of land owned in fee and a great number of acres of land leased or rented. Operations may cover several states with breeding ranches in the south and ranches for the maturing of the cattle in the north.

II. Feeders. Older cattle which are placed in feed yards before marketing. Large operators may own and operate feed yards in connection with other ranches.

III. Dairy cattle. Principal business is dairy products, and the sale of beef and steer calves is merely a side line.

IV. Farm cattle. A branch of other farm operations.

V. Registered cattle.

Some of the accounting problems of each class of cattle will be discussed and followed by a general discussion of problems applicable to the industry as a whole.

Range Cattle

One of the principal accounting difficulties with range cattle is the tally or the number of cattle on hand by ages at the inventory date. Some operators advance ages year by year and reconcile for sale or transfers, with a deduction on account of loss from death or theft. When it is considered that range cattle may be scattered over several states it will be seen that the determination of the number on hand by ages is a difficult matter.

Tallies may be corrected in part by branding and shipping records, counts by inspectors of loan companies, and estimates made at the time of beef and calf roundups. Generally, a cattleman is extremely careless about tallies and a discovery of an error on the books of a thousand head or so does not seem to disturb him a great deal. In attempting to verify a tally several years ago, the proprietor advised me that it was impossible because one tally had been recorded on the barn door in chalk and now probably was washed off.

In theory there are three distinct stages in the large cattle operation. First, the breeding—usually on breeding ranches in the south. Second, the transfer of the cattle to northern ranches to be matured. Third, the transfer to feed lots for fattening and prior to marketing. The three operations may not be handled by one company but by separate companies, so that the finished product of one company becomes the raw material of the other.

The question of the cost of producing cattle in the case of the large operator differs from the case of a farmer growing crops and producing other livestock. The large operator may wish to know the cost of producing a calf to a certain age, the cost of maturing or the cost of fattening, but he has only one product to deal with and the troublesome problems in respect to allocation of costs to the various products are not met. Inventory questions may be considered in general and not in connection with any particular class of cattle.

Feeders

Cattle are placed in the feed yards in the fall and sold in the spring and summer so that, if a fiscal year ending in July or August is used, the inventory questions are eliminated and all costs may be deferred until the product is sold. It should be noted that an operator may feed cattle and sheep at the same time and then it becomes necessary to apportion the costs between the two in order that information may be secured as to correct profits.

Dairy Cattle

The principal purpose of the dairy farm is to produce milk and related products, and the sale of cows and steer calves for beef is incidental. Total operating costs including depreciation on bulls and cows should be ascertained. The simplest method of handling beef sales is to credit the receipts to the operating costs. To attempt to determine the profit from the sale of beef cattle is impracticable. Strictly speaking there is not a profit but merely a correction of depreciation in the case of cows or a return of costs in the case of calves. However, if cattle are sold for dairy purposes because of a surplus or because of favorable market prices, it is of course proper to compute a profit.

Farm Cattle

A farmer may have a herd of cattle, a flock of sheep, chickens, etc., in addition to farm products. It is a difficult matter in farm and ranch accounting to determine the proper costs to be allocated to the various products. Farm accounting has been compared to manufacturing but it is impossible to maintain for a farm records as complete as are considered necessary for a manufacturing business.

There may be ten to fifteen different activities on a farm and if the farmer kept accurate records as to time, materials, supplies and farm expense, he would be too busy to bother with farming. About the most satisfactory method from a practical standpoint is to maintain records of expense with four or five classifications and distribute the costs to the various products according to the judgment of the farmer.

Registered Cattle

Some companies and persons operate farms to produce only registered and high-grade cattle. Costs are particularly necessary in this case and are not as difficult to determine as in the case of a farm. This branch of the cattle business has been developed and carried on in great part by "gentleman farmers" and in many cases such farms are not operated for profit. An accountant usually has little trouble in installing a proper system of accounting for such farms and it probably does less good and is less needed than in any other case.

Let us now discuss briefly four accounting features which are important in the cattle industry: inventorying; accrual basis of accounting; interest as a cost of production; natural business year.

Inventory

There are three principal methods of inventorying cattle: (1) cost, (2) cost or market, whichever is lower and the (3) farm-price method.

Market prices in the cattle business fluctuate greatly and unless market conditions are recognized, it is possible that the inventories will be overstated. Bankers do not base loans to cattlemen entirely on their financial statements but rely on an actual inspection of the cattle and their own appraiser's opinion as to the market value.

The cost of cattle is an important factor and, of course, is made up of labor, feed and cattle expense; but the cost must be checked with the market. It is considered proper to reflect any decrease in value as measured by the difference between cost and market in the current profit and loss.

The farm-price method is the market price of cattle less transportation and handling charges. This method may recognize an element of profit before the product is sold. Market prices change so rapidly that when the cattle are sold, profits may not materialize and, in fact, losses may be realized. The bureau of internal revenue has recognized this method of inventorying, but even from an income-tax standpoint it has been considered unsatisfactory.

Experience has shown that, with few exceptions, the farm-price method of inventorying cattle is unsound and offers a great opportunity for errors and arbitrary switching of profits or losses from one year to another.

"Cost or market whichever is lower," is the safest and most satisfactory method of inventorying cattle.

Accrual Basis

Many farmers and cattlemen maintain records on a cash-receipts-and-disbursements basis probably because this method of accounting seems simpler. However, there is no justification for any method of accounting other than the accrual basis, although a cattleman may get fairly accurate results by the use of inventories without accruing other items of income or expense.

The bureau of internal revenue has held that if a farmer or cattleman uses inventories, his method of accounting is the accrual basis, and therefore, all items of income and expense must be accrued. The bureau has indicated that a more strict accrual basis will be required in the case of farming and livestock operators than is required for merchandising and manufacturing concerns. If this procedure is followed there will be considerable confusion in determining the tax liability of cattlemen, because few cattlemen have followed a straight accrual basis of reporting taxable income.

Interest as a Cost of Production

Interest expense is an important feature of the cattle business. Unless this element of expense is recognized as a cost it is probable that disaster will result. Interest on lands is somewhat different from interest on cattle. In one particular case a cattleman believed that his operations for the current year were satisfactory until his interest charges on cattle of approximately $60,000.00 were deducted from his gross profit. The final result was a material loss for the year although the cattle were sold at prices which he believed would show a good profit.

Cattle operations vary as between years and the numbers of cattle handled from year to year are far from uniform. It is desirable to recognize interest on cattle loans as a direct cattle expense or serious errors in judgment will be made.

Natural Business Year

The time for a cattleman to close his accounts is in the spring, summer or fall, or any date rather than December 31st. Tallies may be secured more easily in good weather than in the dead of winter, and in most cases the number of cattle on hand is greater on December 31st. It is not difficult to determine the logical date to close the books of a cattleman if his operations are given some study.