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Accounting for Milk Distributing Companies

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THE business of distributing milk has within the past few years been the subject of numerous investigations, official and otherwise, due principally in the beginning to the strenuous objection on the part of the public to the steady advance in the price of the commodity. One result of these investigations has been to change the status of the industry from a private to a semi-public character, somewhat comparable with power, light or coal companies. It seems probable, considering the great importance of milk and its by-products, butter, cheese and cream, as articles of human diet, and the relationship between the milk supply and the health of the children in a community, that the trend toward public regulation of the industry will continue. A sufficient supply of pure milk at fair prices is necessary to the health and comfort of the community. What constitutes a fair price, whether the subject be considered from the point of view of the distributor or the regulating authority, must be determined from an accurate knowledge of the original cost of the milk, plus the costs incidental to its distribution. What these costs are can best be determined from an adequate system of accounts, properly kept. While most of the larger companies have such systems, enough others do not to make the preparation of a comparative statement of the costs of several companies operating in the same territory far from a simple matter. The accountant, therefore, should be fully informed as to the progressive stages of purchase and distribution to the end that he may so conduct an examination as to ascertain the costs of these operations, or, in the case of a system engagement, so design the accounts and records that these costs may readily be determined, and the selling price of the commodity accordingly justified. The following statement of sales, cost and profits is the form used by the several large distributors as evidence submitted at a hearing before the Milk Committee of the United States Food Administration, for the purpose of fixing the prices for bottled grade "B" milk in New York City for the month then ensuing.

Exhibit "A"

Country, bottled—retail:
  Quarts sold,
  Sales,
  Cost—Schedule No. 1:
    Up to delivery,
    Delivery, etc.,
      Total cost,
Net profit,

Exhibit "A"
Schedule No. 1

Amount per quart

Quarts sold,
Costs up to delivery,
  Purchases,
  Country—Can station expenses,
  Country—Factory expenses,
  Freight and ferriage,
  Hauling—City,
  City factory expenses,
  Depreciation.
    Total,
Costs of delivery, etc.:
  Branch operation and maintenance,
  Delivery expenses,
  General, selling and administrative expenses,
  Depreciation,
  Deduction from sales,
  Shrinkage,
    Total,
Total costs,

Further analyses of the items scheduled would show expenses as follows:

Country can station:
  Handling, ice, freight, depreciation, etc.

Country and city factory:
  Bottling, pasteurization, ice, fuel, supplies, etc.

Delivery:
  Horse and wagon and motor truck maintenance, labor, stable expense, container loss, etc.

If the milk were sold to the consumer in the same quantities and form as originally purchased, the final delivered cost would be a comparatively easy matter to determine. This is, however, not the case. In order that a constant supply may be assured, the purchaser must be prepared to take all of the milk that is offered at any season. To refuse the surplus in the months of large production would inevitably result in a restricted output and, in consequence, a shortage in the months of diminished production. This necessitates the conversion of the surplus milk into by-products, such as butter, cream, and cheese, thereby complicating the problem of ascertaining the cost of the milk as delivered to the consumer, which not infrequently takes this aspect:

The "A" Company buys grade "A" and grade "B" milk at its country stations at a varying price per pound, dependent upon the butter fat content. It uses part of this milk for the production of heavy cream, light cream, butter and cheese; sells some of the skimmed milk left after producing these, and sells some grade "A" as grade "B" on account of lack of demand for the better grade. The milk is then "standardized" to conform to legal butter fat requirements, and some of it sold at wholesale in cans, f. o. b., shipping point. The remainder is shipped in cans to the city factory, bottled, and sold by the quart or pint to retail customers. What is the cost of the milk as delivered by the quart or pint at the door? A correct answer to this problem, which is typical of the conditions surrounding the sale of milk at retail, requires accurate knowledge of all of the factors influencing the cost. Primarily, of course, there is the cost of milk purchased. Milk is usually purchased on the basis of a hundred pounds weight of a prescribed butter fat content. Higher prices are paid, in accordance with a graduated scale, for increased richness. The first step then is to ascertain the number of pounds of milk purchased, and to convert this quantity into quarts. This item, with the costs of country handling, including icing, freight, labor, depreciation of plant, etc., brings the milk to the bottling station or factory. It is here that the surplus milk must receive consideration. The factory expense will include a certain amount of overhead applicable to any milk handled, whether sold at wholesale or retail, manufactured into other products or lost in wastage. It should be considered that as the sale of milk at retail is presumably the principal object of the business, all costs otherwise unabsorbed are chargeable to that part of the sales. It seems expedient, therefore, to ascertain at this point the amount of milk sold in bottles at retail, and use this quantity as an objective for the final reconcilement or "tie-up" of the accounting. In the hypothetical case cited we find that two grades of milk, "A" and "B," were purchased. As the principal difference between the two grades is in the sanitary conditions under which the milk is produced, the quantities may be combined in the consideration of overhead expense. It is stated that heavy and light cream, butter and cheese, were produced. The amount of standard grade milk necessary to produce a unit of either of these commodities is a matter of record, so that if no record has been kept of the number of quarts of milk thus diverted, it may be ascertained by multiplying the numbers of each unit produced by the number of quarts of milk necessary to production. The amount of milk purchased, less the amount used in these commodities and sold at wholesale, is the quantity which must bear the general factory overhead applicable to the cost of bottled milk sold at retail. It is here that the knowledge of the number of quarts ultimately distributed is necessary, for between the quantity apparently remaining after allowing for wholesale sales and manufactured products, and that recorded as bottled, there will usually be found a considerable difference. This difference is the cost factor termed "shrinkage," which may be due to spilling or spoiling, or to inexact deduction for manufactured products. Whatever its cause, it must be reckoned with, and its amount can best be determined by the process of elimination of the already known factors. The quantities of buttermilk and skimmed milk sold cannot be considered in the distribution of overhead, as they have already been included in the amount of milk diverted to manufactured products. The cost of the delivered milk having now been ascertained as to prime cost, handling cost, factory overhead and shrinkage, the remaining expenses up to delivery are comparatively simple, consisting principally of bottling and pasteurization. Mention is made of the sale of grade "A" as grade "B." When this occurs it can only be treated as a reduction of the profit in grade "A" milk and not as affecting the cost of grade "B." Among the costs of delivery are two worthy of special mention. One is that of containers. The needless addition to the cost of milk due to the attitude of the public toward the humble milk bottle would be an item of general interest, if it could be ascertained. Milk bottles, whole and in part, may be seen discarded almost anywhere, and perhaps if the truth were known, many others might be found to be temporarily withdrawn from circulation and serving other purposes. In large apartment houses idle bottles may be found literally by the hundreds, in addition to those placed for collection by the milk men. Some of the large distributors charge all bottles purchased into current expense, while others attempt to arrive at an average life for a bottle, which, by the way, is stated to be about eight trips. All of these calculations are handicapped by the fact of the number of bottles in circulation being much larger than the delivered quantities demand. Another point to be considered in cost of delivery is that of unit expenses. It does not follow that because a quart of milk can be sold delivered for sixteen cents, a pint should cost the consumer only one half as much. In several ways it costs the distributor just as much to handle the pint as the quart. Items of such nature as these, whether approached from the standpoint of an investigator or the auditor for the company, must be considered in their relation to the particular conditions under examination. No hard and fast rule will apply to all cases.

Following is a list of the principal asset and liability accounts of a large milk distributing company:

Assets

Plant property:

Land, buildings, machinery, tools and equipment, horses, harness, and vehicles, cattle, furniture and fixtures.

Milk supply and milk routes,

Special fund investments—Route salesmen's deposits,

State workmen's compensation deposit,

Investments,

Inventories—Route products, raw materials and supplies,

Expenditures applicable to future operations,
Cash,
Notes receivable,
Accounts receivable.

LIABILITIES

Capital stock,
Route salesmen's deposits,
Accounts payable,
Accrued accounts—Commissions, interest, taxes, etc.,
Reserves,
Surplus.

The account, "Milk supply and milk routes," represents the good will acquired in the purchase of the properties. The good will in the first item would be that of established and favorably located purchasing centers. "Special fund investment—Route salesmen's deposits" accounts for the investment of the guarantee deposits required from drivers whose duties include making cash collections. The compensation of these men usually includes a commission on the collections they make. The payment of interest by the company on the funds deposited would be a matter of policy to be determined by the company concerned. If interest is paid, the net profit or loss from this source should be shown separately in financial reports. The auditor should call attention to any considerable difference between the market value of the investments and the liability that they are supposed to offset, especially if the former is smaller than the latter. Inventories will quite frequently be found to be book records, particularly in the case of milk. These should be scrutinized as to their reasonableness. For illustration:

In ascertaining the cost of delivered milk, the amount on hand, including milk in transit, plus purchases, less sales and shrinkage, is the book inventory, but a steadily increasing book inventory account, not apparently warranted by increased volume of business, would be open to suspicion, for milk is a perishable commodity and cannot safely be accumulated. The probability would be an error in the records, whereby not enough allowance was made for milk used in manufacture, or for shrinkage. Accounts receivable can seldom be verified in detail without involving too much expense. Tests can and should be made of a sufficient number of the accounts to determine their collectibility. A list of the route salesmen (drivers) should be obtained and the liability for their deposits checked against the list.

The character of these comments has been largely influenced by the assumption that the price charged to the public for milk and its products will be a large factor in any engagement for the audit of the accounts of milk distributing companies or for the installation of cost accounting systems for them. In such audits particularly the attitude of the public accountant must be one of unprejudiced and impartial interest. When retained by the distributor he must keep in mind the point of view of the public, which is always curious to know what becomes of the difference between the price paid by the distributor to the farmer and that which the consumer pays to the distributor, so that all facts tending to promote a better understanding shall be given due prominence. When acting in behalf of the public he must not be influenced by his clients' interest or feeling (in which he might share), to the extent of neglecting the distributor's rights to an equal share of his unbiased attention. It is difficult for the public to appreciate the cost of overhead and indirect expense in any line of distribution, but in many lines it is not so easy to determine the prime cost of the article sold, and hence the comparison with the selling price is not so obvious.

In making up reports, comparison should always be made on the basis of both quantities and dollars. It hardly seems necessary to remark that any statements relating to the cost of distribution in a given period must be reconcilable with the results of operations as shown by the general books for the same period. The different classes of trade sold must have careful attention to determine which cost factors are especially applicable to each, and to what extent. Retail delivered sales will be found to contain practically all factors, sales at wholesale, f. o. b. shipping point but few, and other sales in variation. Delivery expenses are worthy of study. A small dealer has been known to receive credit for greater efficiency in this direction than his large competitor, until an investigation proved that his efficiency consisted in refusing business outside of a small, congested territory, while the big dealer, considering himself to be a public servant, would deliver a pint of milk practically wherever requested in city limits. As a famous painter is said to have stated that he mixed his paints with brains, so if the public accountant will mix his professional knowledge with common sense, he may be a valuable promoter of good understanding between the public and the distributors of one of its most necessary articles of consumption.

Non-par Value Stock from an Accounting Point of View
(Continued)

THE effect of non-par value common stock laws upon the policies of directors should be wholesome in many respects. Because previous laws made shares of stock which were issued for less than their par value partially paid and therefore assessable for the difference, it was quite customary for companies acquiring patents, copyrights, good-will, etc., to fix the value of such acquisitions at the par value of the stock issued in exchange therefor. This, while entirely legal, provided the directors declared that the value fixed was in their judgment correct and there was no fraud involved, led to what amounted to an admission, sometimes almost in the same breath, that the assets were not worth what they were declared to be worth by accepting from the recipients of the stock a donation of a large block thereof, for the purpose of providing working capital. After going through such legal formality, the stock could be sold at any price or if desired given away. In many instances it was given away as a bonus to induce the purchase of preferred shares.

This resulted in a long and involved series of entries setting up the assets acquired and the stock outstanding at fictitious values; creating a treasury stock account at an inflated value, with an offsetting account, in order to keep the books in balance, designated by some such title as "Stock donation account." This was followed by certain adjusting entries as the stock was sold, writing off the discount from the par value against the stock donation account and finally transferring the balance to a surplus account.

Much annoyance and controversy was occasioned by this disposition of the balance in the stock donation account. Some contended that it should be closed into a restricted surplus account and made a part of the invested capital. Others insisted, and with the support of court decisions, it must be admitted, that it should become a part of the free surplus, thus being susceptible to distribution as dividends. The former disposition undoubtedly carried out the