Economics of Beef Cattle Feeding in Oregon

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Continued interest in *Beef Cattle Feedlots In Oregon*¹, a special report which was first released in early 1964 and reprinted later in the year, prompts the preparation of this brief supplement in order to provide more current information. Persons wishing to achieve some measure of understanding concerning the economic aspects of feeding cattle in Oregon may still want to refer to the basic report.

This report deals only with feeding steers. No implication is intended that feeding steers is more or less profitable than feeding heifers, calves, cows, or some combination. An operator can use some of the information contained here to determine his feeding policy with respect to sex and age of cattle placed on feed. Those feeders who are most successful give careful consideration to feeder-slaughter cattle price relationships when buying animals to be finished.

**THE PROFIT SITUATION, 1964-1967**

Finished cattle marketed by Oregon feeders increased from 136,000 head in 1963 to 189,000 in 1966, a 40% increase. The year 1963 was considered to be an unprofitable feeding period, largely because feeder cattle prices were

high, relative to slaughter prices. In 1964 the number of cattle fattened increased by 10,000, partially because aggregate feeding conditions were somewhat more favorable. Table 1 shows only a small profit in 1964, but better than average feeders probably made higher returns to management than those shown. Furthermore, some of the items classified as "nonfeed costs" are not out-of-pocket expenses (own labor, depreciation, interest on own capital), and can be used for the same purposes as return to management in any given period.

In 1965 feeding conditions improved significantly because of the relatively large spread between feeder and slaughter cattle prices. Very satisfactory returns to management were realized. Numbers of cattle finished in Oregon feedlots increased again in 1966 to a record high level. Between 1965 and 1966, however, feeder cattle prices increased an average of $3.12 per hundredweight, while slaughter cattle prices went up only $1.00. Largely for this reason, returns to management in 1966, as shown in Table 1, were very small.

The number of cattle finished in Oregon in 1967 may be slightly less than in 1966. Data for the first nine months of 1967 indicate only those feeders able to perform better than shown in this report will make a satisfactory return to the operator or owner.

FACTORS AFFECTING NET RETURNS

It may seem to some that feeding cattle in Oregon is risky business and, in fact, not really profitable over a period of years. There is no question that this industry is not the place for the inexperienced operator, or for entrepreneurs hoping to realize a substantial profit each year. Profits
Table 1. Average of All Feedlot Costs, Amount Received by Feeder, and Net Profit Per Head, 1964-1967 (Based on Lot with 2,000 Head Capacity)

<table>
<thead>
<tr>
<th></th>
<th>1964</th>
<th>1965</th>
<th>1966</th>
<th>1967¹/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average feedlot cost per head:</td>
<td>$142.97</td>
<td>$137.97</td>
<td>$165.49</td>
<td>$169.52</td>
</tr>
<tr>
<td>Feeder animals²/</td>
<td>66.11</td>
<td>62.03</td>
<td>65.75</td>
<td>64.20</td>
</tr>
<tr>
<td>Feed³/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market expense⁴/</td>
<td>9.36</td>
<td>10.19</td>
<td>10.64</td>
<td>10.64</td>
</tr>
<tr>
<td>Nonfeed costs⁵/</td>
<td>17.53</td>
<td>17.95</td>
<td>19.35</td>
<td>19.88</td>
</tr>
<tr>
<td>Total feedlot cost per head</td>
<td>$230.97</td>
<td>$228.14</td>
<td>$261.23</td>
<td>$264.24</td>
</tr>
<tr>
<td>Income received per head</td>
<td>$232.48</td>
<td>$254.04</td>
<td>$264.67</td>
<td>$266.67</td>
</tr>
<tr>
<td>Net income per head</td>
<td>$ 1.51</td>
<td>$ 25.90</td>
<td>$ 3.44</td>
<td>$ 2.43</td>
</tr>
</tbody>
</table>

¹/ An average of the first nine months of the year.

²/ Good and choice feeder steers weighing 650 pounds, based on prices at Ontario, Oregon. Also, $0.50/cwt. is added for transport from Ontario to the feedlot.

³/ A total of 3,094 pounds of feed was required to obtain a gain of 412.5 pounds.

⁴/ A 4% pencil shrink at feedlot.

⁵/ Includes depreciation, interest expense, taxes, labor, veterinary expense, fuel, electricity, water, and repairs.
come hard, even for the skilled and experienced operators. Although cost-price relationships are, in general, determined in the market place, the astute operators can and do use their buying and selling ability to increase returns. Examples of what may be done at given times are cited below.

Feed Prices and Composition of Rations

Table 2 shows a fairly typical feed ration with prices for the past four years. Of course, many types of rations are used by feeders. Interviews with some operators indicate that much attention is given to using the lowest priced feeds consistent with good feeding practices. Considerable wheat is used when wheat prices are competitive with barley. It is common practice to mix wheat, barley, grain sorghum and/or corn when price relationships warrant this action.

The roughage requirement may be satisfied with alfalfa, other hay, silage, or some combination, depending on the price of each. By-products such as pea vines and cull potatoes also may be used effectively in the ration.

When storage facilities are available, large quantities of feed may be purchased to advantage at certain times of the year. Thus, the cost of a well-balanced ration may be less (or more) than shown in Table 2, depending upon the buying knowledge of the operator. When a ration with the feeding value of that shown here can be purchased for $1.00 a ton less, the return for each finished animal sold will increase about $1.50. On a feeding operation involving several thousand head, the total increase in net return is, therefore, significant. In fact, in some feeding periods this amount may be the difference between a loss and a profit.
Table 2. Average Feed Ingredient Costs Per Ton, Oregon, 1964 - 1967\(^{1/2}\)

<table>
<thead>
<tr>
<th>Feed ingredient</th>
<th>1964</th>
<th>1965</th>
<th>1966</th>
<th>1967(^{2/})</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Price/ton</td>
<td>Cost</td>
<td>Price/ton</td>
<td>Cost</td>
</tr>
<tr>
<td>Barley or equivalent concentrate, 1,100 lbs.</td>
<td>$43.00</td>
<td>$23.65</td>
<td>$43.00</td>
<td>$23.65</td>
</tr>
<tr>
<td>Alfalfa hay or equivalent roughage, 400 lbs.</td>
<td>25.00</td>
<td>5.00</td>
<td>28.00</td>
<td>5.60</td>
</tr>
<tr>
<td>Beet pulp or equivalent, 300 lbs.</td>
<td>31.00</td>
<td>4.65</td>
<td>32.00</td>
<td>4.80</td>
</tr>
<tr>
<td>Molasses, 100 lbs.</td>
<td>24.00</td>
<td>1.20</td>
<td>21.00</td>
<td>1.05</td>
</tr>
<tr>
<td>Supplement, 100 lbs.</td>
<td>100.00</td>
<td>5.00</td>
<td>100.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Average ingredient cost per ton</td>
<td>$39.50</td>
<td>$40.10</td>
<td>$42.50</td>
<td>$41.50</td>
</tr>
</tbody>
</table>

\(^{1/2}\) The milling of feed is done at the feedlot and the cost is included in the "nonfeed cost" category.

\(^{2/}\) Includes the first 9 months of 1967.
The Price of Feeder Cattle

Table 3 indicates that, on the average over a period of 10 years, the price of feeder steers was the highest in March and the lowest in October. Slaughter cattle prices, on the other hand, were the highest in July and relatively high all summer and early fall. Therefore, feeder cattle placed in the feedlot in March when prices are highest are, on the average, sold at relatively high prices four or five months later.

The successful cattle feeders by no means automatically accept the feeder cattle prices in Ontario or elsewhere. There are times when relatively good feeder cattle buys may be made in the immediate vicinity, reducing the transport and shrinkage costs.

Many successful feeders follow the practice of feeding on a year-round basis. Even when feeder cattle prices appear to be relatively high, net returns may be maximized (or losses minimized) by employing the resources of the operator the year round, thereby spreading the fixed costs over a larger number of cattle.

Slaughter Cattle Prices

The operator's selling ability may enable him to obtain a better than average Portland price for the cattle he markets. An arrangement with a packer for weekly shipments could mean a somewhat higher price. Sometimes it is possible to supply cattle of a given weight and grade for certain segments of the market. For example, some packers in large coastal cities supply choice and prime beef to restaurants and steamship companies. Some feeders supply the right kind of cattle for this specialized market. Of course, possessing the management ability to market cattle that grade more than 50%
Table 3. Slaughter and Feeder Cattle Prices, Monthly Averages for 10 Years, January 1957 to December 1966

<table>
<thead>
<tr>
<th>Month</th>
<th>Slaughter (Portland) 1/</th>
<th>Feeder (Ontario) 2/</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>$24.51</td>
<td>$23.49</td>
</tr>
<tr>
<td>February</td>
<td>24.19</td>
<td>23.82</td>
</tr>
<tr>
<td>March</td>
<td>25.11</td>
<td>24.98</td>
</tr>
<tr>
<td>April</td>
<td>25.37</td>
<td>24.90</td>
</tr>
<tr>
<td>May</td>
<td>25.27</td>
<td>24.70</td>
</tr>
<tr>
<td>June</td>
<td>25.29</td>
<td>24.44</td>
</tr>
<tr>
<td>July</td>
<td>25.62</td>
<td>23.75</td>
</tr>
<tr>
<td>August</td>
<td>25.39</td>
<td>23.49</td>
</tr>
<tr>
<td>September</td>
<td>25.10</td>
<td>23.35</td>
</tr>
<tr>
<td>October</td>
<td>24.50</td>
<td>23.15</td>
</tr>
<tr>
<td>November</td>
<td>24.49</td>
<td>23.46</td>
</tr>
<tr>
<td>December</td>
<td>24.60</td>
<td>23.89</td>
</tr>
</tbody>
</table>

1/ Good and choice, 900 to 1,100 pound steers.

2/ Good and choice, 500 to 700 pound steers.
choice also will result in a higher price. These increased returns must be compared with the additional costs of achieving this quality goal, in order to determine the economic advisability of following such a practice. The prices shown in this report are for slaughter steers that grade 50% good and 50% choice. Other things equal, obtaining $0.25 per hundredweight more means an increase in income to the operator of $2.65 per head.

The Feed Conversion Ratio

In this supplemental report a feed conversion ratio of 7.5 is used, as compared with 8.5 in the original publication. Experimental data and interviews with feeders indicate that feeding efficiency is improving. As a matter of fact, some feeders have feed conversion ratios of 7.0 to 7.25, particularly during the dry months of the year. An improvement in the feed conversion ratio of .25 through effective management means about $2.00 per head more in net returns to the operator.

Nonfeed Costs

Total nonfeed costs were held constant at $17.00 per head through the eight-year period of the basic report. In view of increasing labor costs during the past four years and sharp increases in interest rates beginning in 1966, upward adjustments were made in this cost category from 1964 through 1967 (see Table 1).

In those cases where labor costs can be held below those shown in the

2/ See Beef Cattle Feedlots in Oregon, Special Report 170, for details.
original report (as adjusted), or some of the work can be performed by the
operator and his family, greater returns to the operator can be expected.
More than one third of the nonfeed cost item is a fixed cost (allowance for
depreciation), which means the operator can use this money for living or
other expenses in any given feeding period. In the long run, however, he
must cover all costs or go out of business.

Management of Resources

All of the factors discussed here depend on the operator's ability to
mold his resources into an efficiently operated business. Efficient feed-
buying practices can be more than offset by poor management of the mill and
feedyard. Successful feedlot businesses have consistently good management
in both the long and short run. Day-to-day decisions are believed to be as
important as the long run plans and organization such as location, size, and
feedlot design.

CONCLUSIONS

This study shows that returns to management in cattle feeding are small
in most years. In those cases where rates of performance shown here can be
improved, somewhat larger net returns can be expected. It should be mentioned
that some operators may not even achieve these performance rates, which could
mean actual losses.

While additional cattle feeding in Oregon would be desirable from the
point of view of generating economic activity, it should be encouraged only
among experienced operators. Cattle feeders may like to see years such as