

For example, moving from structure one to two under basic integration, efficiency I increases processor net returns from \$521 to \$523 thousand, or 12 percent, whereas moving from efficiency I to II under structure one increases net returns from \$521 to \$589 thousand or 13 percent. In this trade-off comparison, approximately the same increase in net returns can be achieved under two different arrangements. Comparisons such as these give insight into the structural alternatives for improving returns by integration.

Total net returns over the 1966-69 period were slightly greater when independent plants sold all their milk to independent retailers than when sales were divided between integrated and independent retailers. This is supported by the higher returns under allocation four than allocation three.

Returns under the simple basic model (\$684 thousand monthly average, \$3,285 thousand in total) are greater than returns for all allocations under efficiency I; for allocations one, two and three with basic integration and allocations one and two with cooperative integration under efficiency II; and for allocation one under efficiency III. This suggests that processor-retailer integration might result in no gain in total net revenue to processors if only efficiency I can be reached, minor gains under efficiency II and significant gains under efficiency III. Returns under the simple cooperative model (\$700 thousand monthly, \$3,362 thousand in total) are greater than returns for all allocations under efficiency I; for allocations one through four with basic integration under efficiency II; and for allocation one with basic or cooperative integration under efficiency III. Hence, in going from a cooperative structure to an integrated structure, net returns do not increase until at least 10 percent of the milk moves through efficient integrated plants or at least 65 percent moves through moderately efficient integrated plants.

In general, integration of processing and retailing activities does not necessarily increase net returns to all processors. It appears that net returns to processors would increase if integration was widespread and/or the cost efficiencies of integrated plants relative to independent plants are substantial. From the standpoint of individual processors and retailers there probably exists a strong incentive to integrate, namely more stable product supplies and perhaps greater profits. Hence, while integration may not be profitable from a total industry viewpoint, the movement toward integration may still be quite strong.