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Cash operating income and liquidity management for feeder cattle operations

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Cash operating income and liquidity management for feeder cattle operations

Abstract

Net cash flow measures the amount of cash remaining after all cash expense obligations are satisfied. This cash is available for additional farm investment, off-farm investment, family living, and additional debt repayment. A 5-year, average, monthly, cash-flow statement was used to determine net cash flow for 18 feeder cattle farms. Results indicate that excess cash was used primarily to invest in equipment, vehicles, and nonfarm assets. Investments in buildings increased moderately over the study period, while investment in land was minimal.

Keywords

Cattlemen's Day, 1995; Kansas Agricultural Experiment Station contribution; no. 95-357-S; Report of progress (Kansas State University. Agricultural Experiment Station and Cooperative Extension Service); 727; Beef; Cash flow; Liquidity; Investment; Feeder cattle

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**CASH OPERATING INCOME AND LIQUIDITY
MANAGEMENT FOR FEEDER CATTLE OPERATIONS**

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Summary

Net cash flow measures the amount of cash remaining after all cash expense obligations are satisfied. This cash is available for additional farm investment, off-farm investment, family living, and additional debt repayment. A 5-year, average, monthly, cash-flow statement was used to determine net cash flow for 18 feeder cattle farms. Results indicate that excess cash was used primarily to invest in equipment, vehicles, and nonfarm assets. Investments in buildings increased moderately over the study period, while investment in land was minimal.

(Key Words: Cash Flow, Liquidity, Investment, Feeder Cattle.)

Introduction

Liquidity and cash-flow management tools are essential components used in the implementation of financial control. Liquidity refers to the ability of the farm business to meet financial obligations as they come due and typically is measured using a cash-flow statement. Monthly cash-flow statements provide information necessary to assess seasonal credit requirements. Long-term cash flow projections also can provide information pertaining to a firm's ability to repay intermediate and long-term loans.

The objective of this study was to determine how excess cash profits (if present) were used on feeder cattle farms in Kansas. Monthly sources and uses of funds are presented and discussed.

Experimental Procedures

Data on cash transactions, inventories, and production information for 18 feeder cattle operations were available from the Financial Plus program of the Kansas Farm Management Association. A vast majority of the livestock fed on these farms was purchased rather than raised. To be included in the analysis, a farm had to have data for 1988 through 1992.

A monthly cash-flow statement was constructed to determine the amount of excess cash available for investment and debt repayment. The net cash-flow measure included on-farm sources and uses of cash as well as nonfarm cash flows. Cash operating income, defined as the amount of cash income from the farm business, was used to measure both profitability and liquidity. This cash is used for discretionary purposes such as meeting scheduled principal payments, on- and off-farm investment, and family living. Net loans are calculated as loans received minus loans repaid and reflect the level of debt repayment or lack thereof. A negative value for net loans indicates that producers were paying down debt.

Results and Discussion

Table 1 presents a 5-year, average, monthly, cash-flow statement for the 18 feeder cattle farms. These farms were relatively profitable during the period, averaging \$50,921 of net farm income per year (accrual basis). Cash operating income was much lower, averaging \$33,462 per year. Net

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farm income includes the noncash items of inventory changes and depreciation expense, whereas cash operating income includes only the cash transactions. Net cash flow averaged -\$238 per month or -\$2,852 per year. When positive, this cash is available for new or unplanned investments. Using Table 1, we can analyze the seasonality of the various revenue and expense items as well as the summary variables in the lower portion of the Table. Cash operating income, on average, was positive in March through August. The largest positive, monthly, net, cash flows occurred in January and June. The largest monthly principal payment occurred in May. Feeder cattle farms took out the most loans in January, September, October, and December. Net loans were negative in April through August, corresponding to the positive cash operating incomes during that time. The data indicate that feeder cattle farms were accumulating about \$21,912 of debt per year during this study. Family living

expenses averaged \$16,736 per year; thus, about one-half of cash operating income was used for family living expenses.

Financing of intermediate assets occurred predominately from the use of new or existing debt. The farms in this study increased current inventories of farm assets and non-farm assets. Cash investment in vehicles and equipment was steady during the period. Cash expenditures on buildings increased sharply, growing by nearly 170% over the period. The value of owned land increased by about 7%. Intermediate loan balances increased by \$32,016 during the period.

Cash-flow management is an essential component of effective financial control. Cash planning alleviates last minute decisions that can be costly. Understanding the seasonality of cash sources and uses will allow producers to make better investment decisions.

Table 1. Monthly Cash Flow Statement for Feeder Cattle Farms, 1988-1992.

| | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
|---------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|----------------|----------------|
| Sources | | | | | | | | | | | | |
| Livestock | 94,178 | 74,120 | 92,773 | 95,761 | 121,049 | 106,011 | 97,907 | 109,777 | 90,117 | 79,036 | 93,781 | 85,372 |
| Breeding stock | 202 | 403 | 646 | 192 | 209 | 113 | 450 | 50 | 88 | 81 | 775 | 85 |
| Crops | 10,917 | 5,093 | 4,709 | 5,872 | 8,336 | 7,185 | 9,526 | 3,608 | 5,040 | 10,313 | 4,442 | 9,208 |
| Miscellaneous | 2,488 | 1,273 | 1,849 | 2,668 | 3,195 | 2,382 | 2,860 | 2,517 | 2,615 | 2,833 | 2,633 | 6,570 |
| Asset Sales | 61 | 219 | 111 | 288 | 172 | 213 | 30 | 146 | 1172 | 3058 | 376 | 237 |
| Total Farm Sources | 107,846 | 81,109 | 100,089 | 104,782 | 132,960 | 115,904 | 110,774 | 116,098 | 99,032 | 95,321 | 102,007 | 101,473 |
| Non-farm | 13,353 | 2,169 | 1,177 | 1,239 | 1,782 | 2,402 | 624 | 1,953 | 2,923 | 2,923 | 1,442 | 5,880 |
| Total Sources | 121,199 | 83,278 | 101,266 | 106,021 | 134,742 | 118,306 | 111,398 | 118,052 | 101,954 | 98,244 | 103,448 | 107,353 |
| Uses | | | | | | | | | | | | |
| Livestock purchases | 78,507 | 62,382 | 69,354 | 48,304 | 44,658 | 35,343 | 41,011 | 65,113 | 86,726 | 85,443 | 82,451 | 55,360 |
| Feed | 12,971 | 10,264 | 11,614 | 15,251 | 17,782 | 16,286 | 17,232 | 15,153 | 18,216 | 15,959 | 16,301 | 37,460 |
| Veterinary | 803 | 902 | 1,085 | 1,092 | 667 | 416 | 508 | 625 | 968 | 1,689 | 1,649 | 2,405 |
| Fert., Seed & Chem. | 1,375 | 2,015 | 3,495 | 3,263 | 3,591 | 4,635 | 4,201 | 2,279 | 2,412 | 4,604 | 2,300 | 7,791 |
| Machine Hire & Labor | 3,186 | 2,463 | 2,728 | 3,101 | 2,993 | 3,397 | 4,047 | 4,038 | 3,611 | 3,290 | 3,734 | 6,992 |
| Fuel and Repairs | 1,900 | 2,158 | 2,935 | 2,809 | 3,226 | 3,530 | 4,152 | 3,842 | 3,568 | 3,856 | 3,535 | 4,780 |
| Asset Purchases | 2,641 | 2,596 | 3,808 | 2,189 | 4,025 | 2,960 | 3,189 | 3,762 | 4,727 | 4,520 | 1,273 | 1,925 |
| Interest Paid | 3,688 | 2,417 | 2,502 | 4,297 | 3,935 | 3,252 | 4,407 | 3,229 | 5,713 | 3,323 | 2,780 | 11,173 |
| Miscellaneous | 5,710 | 2,888 | 5,742 | 3,883 | 4,314 | 6,814 | 4,414 | 6,685 | 5,677 | 9,980 | 6,358 | 16,884 |
| Total Farm Uses | 110,780 | 88,085 | 103,264 | 84,189 | 85,190 | 76,634 | 83,162 | 104,726 | 131,617 | 132,663 | 120,382 | 144,770 |
| Tot Non-farm Uses | 23,053 | 6,952 | 3,115 | 3,472 | 2,931 | 3,868 | 2,073 | 2,071 | 4,709 | 4,181 | 2,557 | 5,582 |
| Total Uses | 133,833 | 95,037 | 106,379 | 87,661 | 88,121 | 80,502 | 85,235 | 106,796 | 136,326 | 136,845 | 122,939 | 150,352 |
| Loans Received | 122,110 | 107,702 | 86,253 | 90,983 | 74,456 | 59,843 | 71,708 | 92,022 | 114,324 | 128,156 | 99,391 | 125,854 |
| Loan Payments | 95,310 | 97,320 | 81,766 | 108,275 | 120,896 | 90,069 | 98,550 | 100,360 | 90,035 | 90,448 | 86,232 | 91,629 |
| Net loans | 26,800 | 10,382 | 4,487 | (17,291) | (46,440) | (30,226) | (26,842) | (8,339) | 24,289 | 37,708 | 13,159 | 34,225 |
| Operating Income | (353) | (4,600) | 522 | 22,493 | 51,623 | 42,018 | 30,772 | 14,987 | (29,032) | (35,881) | (17,477) | (41,610) |
| Net Cash Flow | 14,167 | (1,376) | (626) | 1,068 | 181 | 7,578 | (679) | 2,917 | (10,082) | (893) | (6,332) | (8,775) |