

# AGRI-BUSINESS MANAGEMENT



***A Computerized Financial Information  
System for the Farm Supply Industry***

**Dept. of Agricultural Economics  
College of Agriculture Extension Division  
University of Missouri-Columbia**

**MP 345, 73-200**



## A COMPUTERIZED FINANCIAL INFORMATION SYSTEM FOR THE FARM SUPPLY INDUSTRY

Herman Harrison, Jr. and Gary T. Devino\*

### INTRODUCTION

Five seconds. One, two, three, four, five. That doesn't sound like much time, but that is all it would take the computerized financial information system to assemble and print a detailed financial summary and analysis for your firm just like the examples that are illustrated in this manual.

See and study over one hundred different financial comparisons of your own business operation alongside current industry averages that are being developed from the composite records of comparable farm supply firms in the state. Receive complete and up-to-date earnings statements, balance sheets, and ratio analysis summaries for both your firm and the industry.

You get this and more simply by cooperating in the computerized financial information system that has recently been developed by the University of Missouri. It is a program designed especially for the farm supply industry to summarize firm financial performance, compare firm records to those of the industry, and identify just where you are making or losing the most money within your operation.

Sound interesting? Read this user information manual for further detail. It contains reproductions and descriptions of the type of financial analysis your firm can receive and it outlines the requirements that your firm must meet in order to participate in the information system.

### SYSTEM OUTPUT

At the end of each comparison period during a calendar year, cooperating firms will each receive two separate sets of computer printouts. One set will contain financial summaries of your own business operation for the current period and the other will represent the average financial position calculated for similar firms in the state. Each set is identified with an appropriate cover sheet and contains the following financial statements and ratio analysis sheets. An example set of computer printouts follows the discussion.

---

\*Herman Harrison, Jr. is a Technician, Department of Agricultural Economics, and Gary T. Devino is an Associate Professor, Department of Agricultural Economics, University of Missouri-Columbia.

## Earnings Statement

A copy of the earnings statement that is printed by the computer is illustrated on pages 6 thru 13 of this manual. This report summarizes the sales, cost of goods sold, and expenses for a particular time period, such as a month, quarter, or a year, and reports the profit or loss from operations.

The first six pages of the statement summarize the grain, fertilizer, feed, seed, farm supplies, and other departments of a firm and report the gross profit generated within each of these areas in order.

The sheet shown on page 12 lists this same type of information; however, it summarizes the complete business operation. In addition, it lists the other operating and service income generated within the firm. The last value expressed represents the gross profit for the total operation. Note that the program assembles a summary for the current comparison period as well as for the year-to-date operation. Both dollar and percentage values are listed for each item.

Page 13 shows the last sheet contained in the earnings statement. There are fourteen separate operating expenses listed and each is expressed as a percent of gross profit. The ratio is chosen over the more common ratio of expenses to gross income or sales because it is more meaningful for comparisons within the farm supply firm due to the fluctuating commodity prices in the industry. A few cents change in grain prices alone will influence an income ratio to a considerable extent and comparisons from period to period are not as reliable as they are under this method of calculation. Other income and other expenses are listed and finally the net profit derived from your total operation is shown. This value is expressed as a percent of both gross profit and gross income.

## Balance Sheet

An example of the balance sheet that is developed by the computer program is shown on page 14. This statement lists the assets, liabilities, and equity of the business unit as of a given date.

The financial information system assembles the current assets of your firm into eight major account categories and expresses each as a percent of total assets. Likewise, long term assets are divided into four categories as shown.

Current liabilities are classified into six major accounts and each is expressed as a percent of total liabilities and equity. Long term liabilities are divided into three major areas.

Equity is the last value shown on the balance sheet. This value represents the portion of the firm that is actually owned by you.

## Ratio Analysis

The ratio analysis summaries that are prepared for your firm are shown on page 15 of this manual. These ratios are the comparative indicators and measures that represent the current financial condition, efficiency, and profitability of your business. Four major categories of ratios are developed for each firm and are described below.

Liquidity Ratios. Two liquidity ratios are calculated in this category. The current ratio is the relationship of current assets to current liabilities. It is one of the more commonly used indexes of financial strength for your firm and it is a valuable measure of the ability of your business to meet its current obligations. The computed value that is shown in the example signifies that current assets are 1.83 times as large as current liabilities for the composite average of four firms studied.

The liquid ratio is developed similar to the current ratio; however, it is a more severe test of a business' ability to meet its current obligations through use of its current assets. The value of inventories and prepaid expenses are deducted from current assets before making the calculation. This ratio thus concentrates strictly on the liquid assets whose market value is fairly certain.

Solvency Ratios. These ratios supply information with regard to a firm's ability to meet periods of stress and meet current and long term credit obligations. Three ratios are calculated in this category to determine the proportion of invested funds that are borrowed and the funds that are owned by the firm itself.

The liabilities-per-assets ratio relates the proportion of the firm's investment that is supported by creditors and borrowed capital. Forty-eight percent of the capital has been contributed by company creditors in the example shown.

The second ratio developed in this category is computed by dividing total liabilities by equity. This ratio expresses the direct relationship of borrowed capital to owned capital and indicates the security that creditors have in their loan. In the example shown, creditors have slightly less invested in the firm than do the owners.

The fixed assets to equity ratio is derived to indicate the proportion of equity capital that is invested in long term assets of the firm.

Profitability Ratios. This group of ratios is perhaps the most important indicator of your firm's operating efficiency and financial success. Ratios are developed to relate profitability to sales and to investment for both the current comparison period and for the year to date.

Gross return on sales is calculated and shown for the total operation and for each of the departments within the firm. The percentages derived represent the gross profit margin for the total merchandising operation and for each department. The net return on gross income represents the profit margin realized above cost of goods sold and operating expenses for the total operation.

The last two ratios developed in the profitability category represent returns to investment. The net return on assets is the ratio of net profit for the total operation to the total assets of the firm. The net return on equity is a measure of the profits returned to the owners of the business.

Miscellaneous Ratios. Three basic ratios have been developed in this category. An average inventory turnover rate has been computed for the total merchandising operation and for each of six departments in the firm. The values derived are computed by dividing the cost of goods sold by the average inventory during the comparison period. Values denote the frequency that inventory investment is turned during the period studied.

The average collection period represents the ratio of credit sales to cash sales multiplied by the number of days in the comparison period. The larger volume of grain transactions tends to lower the true value of this measure; however, it does serve as an indicator of the quality of the credit policies in your firm.

The last ratio developed represents the relationship of operating expenses to the gross profit of the firm. Operating efficiency is denoted by this value.

#### Departmental Analysis

The percentages developed on the last sheet of the financial information packet summarize departmental contributions to overall sales, purchases, inventories, cost of goods sold, and gross profit. In the example illustrated, feed sales account for only 10.4 percent of total firm sales, but they account for 22.2 percent of the total gross profit.

This concludes the description of the financial analysis you receive by cooperating in the computerized financial information system. Carefully review the computer printout examples on the next few pages and then read the next section of the manual to see what you have to do to participate.

A C O M P U T E R I Z E D F I N A N C I A L I N F O R M A T I O N S Y S T E M  
F O R T H E F A R M S U P P L Y I N D U S T R Y

F I N A N C I A L S T A T E M E N T S  
A N D  
R A T I O A N A L Y S I S S H E E T S

C O M P O S I T E A V E R A G E O F 4 F I R M S

D E C E M B E R 3 1 , 1 9 7 2

D E P A R T M E N T O F A G R I C U L T U R A L E C O N O M I C S  
U N I V E R S I T Y O F M I S S O U R I  
C O L U M B I A

COMPOSITE AVERAGE OF 4 FIRMS  
EARNINGS STATEMENT  
FOR 3 MONTH PERIOD ENDING  
DECEMBER 31, 1972

GRAIN DEPARTMENT

DEPARTMENTAL ANALYSIS	OPERATIONS FOR THIS PERIOD ONLY		OPERATIONS YEAR TO DATE	
	(---\$---)	(SALES) %	(---\$---)	(SALES) %
SALES	<u>424,111</u>	<u>100.0</u>	<u>424,111</u>	<u>100.0</u>
COST OF GOODS SOLD				
BEGINNING INVENTORY	<u>35,356</u>	<u>8.3</u>	<u>35,356</u>	<u>8.3</u>
PURCHASES	<u>404,456</u>	<u>95.4</u>	<u>404,456</u>	<u>95.4</u>
TOTAL GOODS AVAILABLE	<u>439,812</u>	<u>103.7</u>	<u>439,812</u>	<u>103.7</u>
LESS ENDING INVENTORY	<u>32,863</u>	<u>7.7</u>	<u>32,863</u>	<u>7.7</u>
COST OF GOODS SOLD	<u>406,949</u>	<u>96.0</u>	<u>406,949</u>	<u>96.0</u>
GROSS PROFIT ON SALES	<u>17,162</u>	<u>4.0</u>	<u>17,162</u>	<u>4.0</u>

COMMENTS: PREPARED FOR EXAMPLE PURPOSES ONLY



COMPOSITE AVERAGE OF 4 FIRMS  
EARNINGS STATEMENT  
FOR 3 MONTH PERIOD ENDING  
DECEMBER 31, 1972

FERTILIZER DEPARTMENT

DEPARTMENTAL ANALYSIS	OPERATIONS FOR THIS PERIOD ONLY		OPERATIONS YEAR TO DATE	
	(---\$\$---)	(---\$\$---) (SALES) %	(---\$\$---)	(---\$\$---) (SALES) %
SALES	<u>16,554</u>	<u>100.0</u>	<u>16,554</u>	<u>100.0</u>
COST OF GOODS SOLD				
BEGINNING INVENTORY	14,260	86.1	14,260	86.1
PURCHASES	<u>18,512</u>	<u>111.8</u>	<u>18,512</u>	<u>111.8</u>
TOTAL GOODS AVAILABLE	<u>32,772</u>	<u>198.0</u>	<u>32,772</u>	<u>198.0</u>
LESS ENDING INVENTORY	<u>19,196</u>	<u>116.0</u>	<u>19,196</u>	<u>116.0</u>
COST OF GOODS SOLD	<u>13,576</u>	<u>82.0</u>	<u>13,576</u>	<u>82.0</u>
GROSS PROFIT ON SALES	<u>2,978</u>	<u>18.0</u>	<u>2,978</u>	<u>18.0</u>

COMMENTS: PREPARED FOR EXAMPLE PURPOSES ONLY.



COMPOSITE AVERAGE OF 4 FIRMS  
EARNINGS STATEMENT  
FOR 3 MONTH PERIOD ENDING  
DECEMBER 31, 1972

FEED DEPARTMENT

DEPARTMENTAL ANALYSIS	OPERATIONS FOR THIS PERIOD ONLY (---\$\$---) (---\$\$---) (SALES) %	OPERATIONS YEAR TO DATE (---\$\$---) (---\$\$---) (SALES) %
SALES	<u>52,172</u> 100.0	<u>52,172</u> 100.0
COST OF GOODS SOLD		
BEGINNING INVENTORY	<u>9,884</u> 18.9	<u>9,884</u> 18.9
PURCHASES	<u>44,073</u> 84.5	<u>44,073</u> 84.5
TOTAL GOODS AVAILABLE	<u>53,957</u> 103.4	<u>53,957</u> 103.4
LESS ENDING INVENTORY	<u>7,738</u> 14.8	<u>7,738</u> 14.8
COST OF GOODS SOLD	<u>46,219</u> 88.6	<u>46,219</u> 88.6
GROSS PROFIT ON SALES	<u>5,953</u> 11.4	<u>5,953</u> 11.4

COMMENTS: PREPARED FOR EXAMPLE PURPOSES ONLY

COMPOSITE AVERAGE OF 4 FIRMS  
EARNINGS STATEMENT  
FOR 3 MONTH PERIOD ENDING  
DECEMBER 31, 1972

FARM SUPPLIES DEPARTMENT

DEPARTMENTAL ANALYSIS	OPERATIONS FOR THIS PERIOD ONLY		OPERATIONS YEAR TO DATE	
	(---\$---)	(---\$---) % (SALES)	(---\$---)	(---\$---) % (SALES)
SALES	<u>6,939</u>	<u>100.0</u>	<u>6,939</u>	<u>100.0</u>
COST OF GOODS SOLD				
BEGINNING INVENTORY	<u>10,516</u>	<u>151.5</u>	<u>10,516</u>	<u>151.5</u>
PURCHASES	<u>8,338</u>	<u>120.2</u>	<u>8,338</u>	<u>120.2</u>
TOTAL GOODS AVAILABLE	<u>18,854</u>	<u>271.7</u>	<u>18,854</u>	<u>271.7</u>
LESS ENDING INVENTORY	<u>12,113</u>	<u>174.6</u>	<u>12,113</u>	<u>174.6</u>
COST OF GOODS SOLD	<u>6,741</u>	<u>97.1</u>	<u>6,741</u>	<u>97.1</u>
GROSS PROFIT ON SALES	<u>198</u>	<u>2.9</u>	<u>198</u>	<u>2.9</u>

COMMENTS: PREPARED FOR EXAMPLE PURPOSES ONLY

COMPOSITE AVERAGE OF 4 FIRMS  
EARNINGS STATEMENT  
FOR 3 MONTH PERIOD ENDING  
DECEMBER 31, 1972

OTHER DEPARTMENTS

DEPARTMENTAL ANALYSIS	OPERATIONS FOR THIS PERIOD ONLY % (SALES)	OPERATIONS YEAR TO DATE % (SALES)
SALES	(---\$\$---	(---\$\$---
COST OF GOODS SOLD	(---\$\$---	(---\$\$---
BEGINNING INVENTORY	(---\$\$---	(---\$\$---
PURCHASES	(---\$\$---	(---\$\$---
TOTAL GOODS AVAILABLE	(---\$\$---	(---\$\$---
LESS ENDING INVENTORY	(---\$\$---	(---\$\$---
COST OF GOODS SOLD	(---\$\$---	(---\$\$---
GROSS PROFIT ON SALES	(---\$\$---	(---\$\$---

COMMENTS: PREPARED FOR EXAMPLE PURPOSES ONLY

COMPOSITE AVERAGE OF 4 FIRMS  
EARNINGS STATEMENT  
FOR 3 MONTH PERIOD ENDING  
DECEMBER 31, 1972

ANALYSIS FOR TOTAL OPERATION	OPERATIONS FOR THIS PERIOD ONLY		OPERATIONS YEAR TO DATE	
	(---\$---)	(---\$---)	(---\$---)	(---\$---)
	%		%	
	(SALES)		(SALES)	
SALES OF MERCHANDISE	502,215	96.5	502,215	96.5
COST OF GOODS SOLD				
BEGINNING INVENTORY	71,799	14.3	71,799	14.3
PURCHASES	480,974	95.8	480,974	95.8
TOTAL GOODS AVAILABLE	552,773	110.1	552,773	110.1
LESS ENDING INVENTORY	77,362	15.4	77,362	15.4
COST OF GOODS SOLD	475,411	94.7	475,411	94.7
GROSS PROFIT ON SALES	26,804	5.3	26,804	5.3
OPERATING AND SERVICE INCOME	18,391	3.5	18,391	3.5
GROSS PROFIT FOR TOTAL OPERATION	45,195	8.7	45,195	8.7

COMMENTS: PREPARED FOR EXAMPLE PURPOSES ONLY

COMPOSITE AVERAGE OF 4 FIRMS  
EARNINGS STATEMENT  
FOR 3 MONTH PERIOD ENDING  
DECEMBER 31, 1972

ANALYSIS FOR TOTAL OPERATION	OPERATIONS FOR THIS PERIOD ONLY	OPERATIONS YEAR TO DATE
(---\$\$---)	(---\$\$---)	(---\$\$---)
%	%	%
(GROSS)	(GROSS)	(GROSS)
GROSS PROFIT FOR TOTAL OPERATION	45,195	45,195
OPERATING EXPENSES		
SALARIES AND WAGES	12,946	12,946
PAYROLL TAXES	601	601
EMPLOYEE BENEFITS	81	81
DEPRECIATION	5,319	5,319
RENT	1,468	1,468
REPAIRS	3,014	3,014
INSURANCE	1,579	1,579
TAXES	1,452	1,452
UTILITIES	1,445	1,445
ADVERTISING	457	457
TRAVEL AND ENTERTAINMENT	205	205
SUPPLIES	3,531	3,531
PROFESSIONAL SERVICES	199	199
MISCELLANEOUS EXPENSE	592	592
TOTAL OPERATING EXPENSES	32,889	32,889
OPERATING PROFIT	12,306	12,306
OTHER INCOME	472	472
OTHER EXPENSES	2,333	2,333
NET PROFIT	10,445	10,445
AS PERCENT OF GROSS INCOME	23.1	23.1
	2.0	2.0
	1.0	1.0
	5.2	5.2
	27.2	27.2
	72.8	72.8
	1.3	1.3
	.4	.4
	7.8	7.8
	.5	.5
	1.0	1.0
	3.2	3.2
	3.2	3.2
	1,445	1,445
	1,452	1,452
	1,579	1,579
	3,014	3,014
	1,468	1,468
	5,319	5,319
	81	81
	.2	.2
	1.3	1.3
	28.6	28.6

COMPOSITE AVERAGE OF 4 FIRMS  
BALANCE SHEET  
DECEMBER 31, 1972

ASSETS	(---\$---)	(TOTAL)	%	LIABILITIES AND EQUITY	(---\$---)	(TOTAL)	%
<b>CURRENT ASSETS</b>							
CASH	22,011	7.8		NOTES PAYABLE	34,250	12.1	
MARKETABLE SECURITIES	3,080	1.1		ACCOUNTS PAYABLE	31,983	11.3	
RECEIVABLES	39,635	14.1		ADVANCES RECEIVED FOR SALES	9,582	3.4	
ADVANCES PAID ON PURCHASES	3,522	1.2		ACCRUED EXPENSES	585	.2	
ACCRUED STORAGE CHARGES	70,321	24.9		INCOME TAXES PAYABLE	---	---	
INVENTORIES	1,217	.4		OTHER CURRENT LIABILITIES	---	---	
PREPAID EXPENSES	---	---		TOTAL CURRENT LIABILITIES	76,400	27.1	
OTHER CURRENT ASSETS	---	---		<b>LONG TERM LIABILITIES</b>			
TOTAL CURRENT ASSETS	139,786	49.6		LONG TERM DEBT	58,724	20.8	
LONG TERM ASSETS	---	---		DEFERRED INCOME TAXES	---	---	
INVESTMENTS AND OTHER ASSETS	---	---		DEFERRED INVESTMENT CREDIT	---	---	
PROPERTY, PLANT AND EQUIPMENT	139,476	49.5		TOTAL LONG TERM LIABILITIES	58,724	20.8	
INTANGIBLES	---	---		<b>EQUITY</b>			
OTHER LONG TERM ASSETS	2,751	1.0		EQUITY	146,889	52.1	
TOTAL LONG TERM ASSETS	142,227	50.4		TOTAL LIABILITIES AND EQUITY	282,013	100.0	
TOTAL ASSETS	282,013	100.0					

COMMENTS: PREPARED FOR EXAMPLE PURPOSES ONLY



COMPOSITE AVERAGE OF 4 FIRMS  
RATIO ANALYSIS  
FOR 3 MONTH PERIOD ENDING  
DECEMBER 31, 1972

LIQUIDITY RATIOS	SOLVENCY RATIOS
------------------	-----------------

CURRENT RATIO 1.83  
LIQUID RATIO 0.89

LIABILITIES/ASSETS 0.48  
LIABILITIES/EQUITY 0.92  
FIXED ASSETS/EQUITY 0.97

	THIS PERIOD	YEAR TO DATE
PROFITABILITY RATIOS:		
GROSS RETURN ON SALES	<u>5.3%</u>	<u>5.3%</u>
GRAIN	<u>4.0</u>	<u>4.0</u>
FERTILIZER	<u>18.0</u>	<u>18.0</u>
SEED	<u>21.0</u>	<u>21.0</u>
FEED	<u>11.4</u>	<u>11.4</u>
FARM SUPPLIES	<u>2.9</u>	<u>2.9</u>
OTHER DEPARTMENTS	<u>0.0</u>	<u>0.0</u>
NET RETURN ON GROSS INCOME	<u>2.0</u>	<u>2.0</u>
NET RETURN ON ASSETS	<u>3.7</u>	<u>3.7</u>
NET RETURN ON EQUITY	<u>7.1</u>	<u>7.1</u>

	THIS PERIOD	YEAR TO DATE
MISCELLANEOUS RATIOS:		
AVERAGE INVENTORY TURNOVER	<u>6.4</u>	<u>6.4</u>
GRAIN	<u>11.9</u>	<u>11.9</u>
FERTILIZER	<u>0.8</u>	<u>0.8</u>
SEED	<u>0.5</u>	<u>0.5</u>
FEED	<u>5.2</u>	<u>5.2</u>
FARM SUPPLIES	<u>0.6</u>	<u>0.6</u>
OTHER DEPARTMENTS	<u>0.0</u>	<u>0.0</u>
AVERAGE COLLECTION PERIOD (DAYS)	<u>6.9</u>	<u>6.9</u>
OPERATING EXPENSES/GROSS PROFIT	<u>72.8%</u>	<u>72.8%</u>

COMMENTS: PREPARED FOR EXAMPLE PURPOSES ONLY

..

COMPOSITE AVERAGE OF 4 FIRMS  
DEPARTMENTAL ANALYSIS  
FOR 3 MONTH PERIOD ENDING  
DECEMBER 31, 1972

DEPARTMENT	SALES	BEGINNING INVENTORY	PURCHASES	ENDING INVENTORY	COST OF GOODS SOLD	GROSS PROFIT
GRAIN	<u>84.4%</u>	<u>49.2%</u>	<u>84.1%</u>	<u>42.5%</u>	<u>85.6%</u>	<u>64.0%</u>
FERTILIZER	<u>3.3%</u>	<u>19.9%</u>	<u>3.8%</u>	<u>24.8%</u>	<u>2.9%</u>	<u>11.1%</u>
SEED	<u>0.5%</u>	<u>2.5%</u>	<u>1.2%</u>	<u>7.0%</u>	<u>0.4%</u>	<u>1.9%</u>
FEED	<u>10.4%</u>	<u>13.8%</u>	<u>9.2%</u>	<u>10.0%</u>	<u>9.7%</u>	<u>22.2%</u>
FARM SUPPLIES	<u>1.4%</u>	<u>14.6%</u>	<u>1.7%</u>	<u>15.7%</u>	<u>1.4%</u>	<u>0.7%</u>
OTHER DEPARTMENTS	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
TOTAL DEPARTMENTS	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

DEPARTMENTAL CONTRIBUTION

COMMENTS: PREPARED FOR EXAMPLE PURPOSES ONLY

## GENERAL CONSIDERATIONS AND REQUIREMENTS FOR PARTICIPATION

Your first reaction is probably that participation in a project of this magnitude just won't be worth the effort. Let the farm supply industry develop its own information and then I will compare my firm records to what they tell me is good or bad performance. After all, why should I be expected to provide financial information about my firm to let others see how I am doing. My competitors don't need to know about my operation.

First of all, let there be assurances that your firm records remain confidential. You are the only person that will receive printouts relating to your firm's operation.

Second, you and your competitors in the state are the farm supply industry. At present, there are no sources of financial or operating data available that are known to be valid for comparison with Missouri farm supply firms. How else can financial information for the industry be assembled without the cooperation of individual firms who make it up.

Third, you get back more information than you ever put into it. Participation in the financial information system doesn't require much of your time. You shouldn't have to make any major revisions in your present book-keeping system.

### Standardized Accounts

Within your bookkeeping system you maintain separate accounts for receivables, labor expense, cash on hand, and etc. This breakdown is essential for the development of your year end tax reports and other summaries assembled for the business operation.

The financial information system has been developed to work with similar accounts. Unfortunately, not all firms itemize individual transactions alike. Since the objective of the information system is to develop standard formatted financial statements for all firms and develop industry averages for comparison purposes, it is imperative that each firm follow equivalent procedures in assembling their data. Transactions recorded as feed sales must be just that and nothing else. Otherwise, the industry data developed for comparison purposes would be just a jumbled set of numbers with little, if any, meaning.

To overcome this possible problem and assure that the comparison data developed for the industry is indeed made up of transactions that the account name implies, a standard chart of accounts has been adopted for submitting individual firm records. This chart was developed especially for the farm supply industry by the Grain and Feed Dealers National Association.

The major accounts in the chart are outlined on the following pages.



## BALANCE SHEET ACCOUNTS

## 8. CURRENT ASSETS -- Itemized by

- Cash
- Marketable Securities
- Receivables
- Allowance for Bad Debts
- Advances Paid on Purchases
- Accrued Storage Charges
- Inventories
- Prepaid Expenses
- Other Current Assets

## 9. LONG TERM ASSETS -- Itemized by

- Investments and Other Assets
- Property, Plant and Equipment
- Allowances for Depreciation
- Intangibles
- Other Long Term Assets

## 10. CURRENT LIABILITIES -- Itemized by

- Notes Payable
- Accounts Payable
- Advances Received for Sales
- Accrued Expenses
- Income Taxes Payable
- Other Current Liabilities

## 11. LONG TERM LIABILITIES -- Itemized by

- Long Term Debt
- Deferred Income Taxes
- Deferred Investment Credit

## 12. EQUITY

Submission of Data

At periodic intervals during an accounting period, each firm must assemble account totals from the records of its bookkeeping system as shown in the chart of accounts, transfer the data to code sheets and forward the completed account summaries to the University of Missouri for computer processing.

The program is designed to accept data from your firm on a monthly, quarterly, semi-annual, or annual basis. Financial summaries can likewise

be made on the same basis. Should comparisons be made at six-month time intervals, the program is capable of accepting monthly input data and accumulating it till the end of the comparison period for each firm, or it will accept a complete six-month summary on one input form.

Financial comparisons are made only on the major categories as indicated by all upper case lettering or by the blocking pattern in the chart of accounts. Individual firms can consequently report data in one of two ways. Should you choose, you can add all grain sales together and report only one figure for total grain sales or you can itemize sales for each commodity within the grain department and list each separately. In this latter case, the computer will add all commodities in the department together for you. In some cases, this method will save you time because you can merely transfer individual account totals from your accounting records onto code forms. This same procedure is incorporated throughout the chart of accounts.

The following examples illustrate how you would use the code form that has been designed for submitting individual firm data to the information system. Assume that the values listed on the computer printouts shown earlier represent your firm instead of the composite average of four firms and that no data had been submitted to the system during a prior comparison period. You would record beginning inventory data for the grain department as of October 1 as follows. Disregard the numbers that are in parenthesis. They are for computer processing purposes only.

ITEM DESCRIPTION		NET SALES	PURCHASES	INVENTORY
(01012)	GRAIN DEPARTMENT	(01) _____	(02) _____	(03) <u>35,356</u>
(01001)	Wheat	(01) _____	(02) _____	(03) _____
(01002)	Corn	(01) _____	(02) _____	(03) <u>X</u>
(01003)	Barley	(01) _____	(02) _____	(03) _____
(01004)	Oats	(01) _____	(02) _____	(03) _____
(01005)	Rye	(01) _____	(02) _____	(03) _____
(01006)	Grain Sorghum	(01) _____	(02) _____	(03) <u>X</u>
(01007)	Soybeans	(01) _____	(02) _____	(03) <u>X</u>
(01008)	Rice	(01) _____	(02) _____	(03) _____
(01009)	Other Grain	(01) _____	(02) _____	(03) _____

The X's signify that you could have entered values by commodity instead of by department total. However, it is imperative that data not be reported in both locations.

The following code sheet would be prepared as soon after December 31 as possible to summarize the sales, purchases, and ending inventory values in the grain department for the three-month comparison period.

ITEM DESCRIPTION		NET SALES	PURCHASES	INVENTORY
(01012)	GRAIN DEPARTMENT	(01) <u>424,111</u>	(02) <u>404,456</u>	(03) <u>32,863</u>
(01001)	Wheat	(01) _____	(02) _____	(03) _____
(01002)	Corn	(01) <u>X</u>	(02) <u>X</u>	(03) <u>X</u>
(01003)	Barley	(01) _____	(02) _____	(03) _____
(01004)	Oats	(01) _____	(02) _____	(03) _____
(01005)	Rye	(01) _____	(02) _____	(03) _____
(01006)	Grain Sorghum	(01) <u>X</u>	(02) <u>X</u>	(03) <u>X</u>
(01007)	Soybeans	(01) <u>X</u>	(02) <u>X</u>	(03) <u>X</u>
(01008)	Rice	(01) _____	(02) _____	(03) _____
(01009)	Other Grain	(01) _____	(02) _____	(03) _____

Each department must be summarized in a manner similar to these examples and so must every other account used in the chart. The following example shows how the operating expense, salaries and wages, might be recorded.

ITEM DESCRIPTION		DOLLAR VALUE
(11301)	SALARIES AND WAGES	(07) <u>12,946</u>
(11302)	Office Salaries	(07) <u>X</u>
(11303)	Management Salaries	(07) <u>X</u>
(11304)	Direct Labor	(07) _____
(11305)	Indirect Labor	(07) _____
(11306)	Other Labor	(07) <u>X</u>

Again, the X's refer to an alternative method of entering your account summaries directly from your records.

Beginning inventory values are required only at the time you start participating in the information system. Thereafter the values you record as ending inventories are retained within the computer for use as beginning values for the next comparison period.

A standardized code form has been assembled in a separate booklet. It contains the complete chart of accounts formatted similar to the examples shown above. These forms are supplied to all cooperating firms and you are required to use only this source in submitting your data to the information system.

Remember two very important facts about the computerized financial information system. The financial analysis you receive for your own business operation can be no more accurate than the data you submit. It is imperative that you submit only complete and accurate data. Second, comparison data for the industry represented is made partially of your firm's data. It can at best be no more accurate than your own contribution.





Issued in furtherance of cooperative extension work, acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. Carl N. Scheneman, Vice-President for Extension, Cooperative Extension Service, University of Missouri, Columbia, Mo. 65201. The University of Missouri-Columbia is an equal educational opportunity institution.