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FINANCIAL STATEMENTS FOR AGRICULTURAL BUSINESSES

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FINANCIAL STATEMENTS for AGRICULTURAL BUSINESSES

**Ralph E. Hepp, Extension Economist
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Managers measure the financial position and profitability of the business entity by developing financial statements. A minimum of four financial reports should be prepared: a balance sheet, an income statement, a statement of cash flows, and a reconciliation of owner equity. These statements are the basic financial reports the manager uses in assessing the strengths and weaknesses of an operation, reporting financial results to owners and creditors, and identifying business adjustments required for achieving business objectives.

This publication explains the statements, provides worksheets for preparing the reports, and gives instructions for completing the schedules. It concludes with a set of financial management measures and ratios derived from these reports that summarize the financial position and performance of the business.

The worksheets and financial statements assume an agricultural producer records transactions under the cash basis of accounting. Accrual adjustments are made on the income statement to show inventory changes, so a more accurate status of the firm's financial position can be presented. The worksheet schedules allow a place to record inventory and liability data needed to prepare an accrual income statement.

BALANCE SHEET

A balance sheet is a statement showing a firm's financial position at the beginning and end of an accounting period. It is also called a "Statement of Financial Position" or "Net Worth Statement". It lists the entity's assets, liabilities, and owner's equity. Assets are items of value

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owned by the business such as money, crops, buildings, land and machinery, as well as intangible rights, such as amounts due the firm for products and services sold on credit. Liabilities are debts or obligations of the enterprise to pay money or render services at some future date.

Owner's equity is the interest of the owners in the assets of the business represented by capital contributions and retained earnings and is measured by the excess of the assets over the liabilities. Owner's equity is expressed in the form of an equation and is calculated by subtracting liabilities from assets. For example, if a business has assets of \$10,000 and liabilities of \$3,000, the owner's equity is \$7,000.

Assets and liabilities on the balance sheet are categorized to facilitate analysis. The customary group headings are current and noncurrent, the format used in the following statements, but the balance sheet could be divided into current, intermediate and long-term categories. In this case, long-term assets and liabilities are separated into land and land improvement assets and liabilities, and intermediate assets and liabilities are machinery, breeding livestock, and other assets and liabilities with an expected life of one to ten years.

COMPLETING THE BALANCE SHEET SCHEDULES

The following paragraphs explain the usual current and noncurrent asset and liability categories used in balance sheets of agricultural firms. After the balance sheet schedules are completed, transfer the totals from the schedules to the balance sheet. The numbers listed after the account titles on the balance sheet correspond to the schedule number.

CURRENT ASSETS

A current asset is an item having a life of one year or less, or the normal operating cycle of the business. It includes cash and other assets that reasonably can be expected to be converted

into cash or consumed in the operation of the business within one year. Assets are arranged under the current asset heading in the expected order of convertibility to cash.

Cash and checking accounts (Schedule 1) are paper currency on hand and amounts on demand deposits in a financial institution. The amounts listed are the balance in the checkbook on the date of the balance sheet.

Savings accounts (Schedule 1) are the amounts in business savings accounts, certificates of deposit, money market accounts, and other accounts on deposit in financial institutions.

Marketable securities (Schedule 1) are readily marketable equity or debt security investments such as U.S. government bonds, hedging account deposits, shares of stock in corporations, and other securities. Securities are temporary investment of idle funds which can be sold and used in the payment of debts or other uses in current operations. Marketable securities should be valued at the net market price or the market value less selling expenses.

Accounts receivables (Schedule 1) are amounts due the business on account from customers who have bought products or received services. These claims arise out of sales on credit to others, such as the custom combining of grain for the neighbor who has not paid the bill or milk sold with payment due in one month. Accounts receivables should be valued at the expected payoff price for the items sold.

Crop and feed inventory (Schedule 2) are crops held for sale and feed held for animals. The description of the item, quantity, market price per unit, and total value are listed for each item on inventory. Net market price, after transportation and selling costs, should be used in valuing the items.

Livestock (held for sale) inventory (Schedule 3) lists the quantity, market price per unit, and total value of feeder cattle, hogs, sheep and other livestock held for sale. Breeding stock inventory that will be culled during the year should be entered in Schedule 3. Net market prices after transportation and marketing costs should be used in valuing the livestock.

Supplies inventory and prepaid expenses (Schedule 4) are inputs on inventory that have not been consumed. Supplies could include fertilizer, seed, chemicals, or other inputs that are left from last year's production. Prepaid expenses are prepayment for services and supplies to be used for the next year's production and are in storage at the date of the statement. It may include the proportionate amount of the property insurance premiums paid for or incurred which are applicable to future periods, prepaid land rents, or fertilizer purchased and applied to unplanted fields for next year's production. Supplies inventory and prepaid expenses are valued at the cost of the inputs.

Cash invested in growing crops (Schedule 5) lists growing crops and assigns a value to the production. For example, on a December 31 balance sheet, a winter wheat crop results in fertilizer, seed, pesticides, gas, and other inputs purchased for next year's production. Since the actual market value of the growing crop is difficult to determine, one method of assigning value to the crop is to assume the cash inputs are an approximate value for the crop. Development of a mid-year balance sheet will have significant cash invested in growing crops.

Other current assets can be listed in Schedule 1 for items of value not recognized in these preprinted forms. It is recommended that a business balance sheet include business assets and not personal assets and a separate balance sheet be prepared for personal items. However, if a consolidated business and personal balance sheet is required by a creditor, the personal assets could be listed in Schedule 1.

NONCURRENT ASSETS

The remaining assets are noncurrent assets or those items that will not be entirely consumed in the operation during one year or the operating business cycle and are not readily convertible into cash. Noncurrent assets are grouped into categories such as breeding livestock, machinery, buildings, and land. The following sections explain each category, method of valuation, and

information needed for the schedules. The net market value is the market value for the asset less the selling expenses and income taxes due on the sale of the assets.

Capital lease (Schedule 6) is an asset in which the LESSEE obtains significant property rights. Although not legally a purchase, accepted accounting practice requires that the leased property be recorded as an asset on the lessee's books. A capital lease exists if any **one** of the following four criteria is met: (1) the lease transfers ownership of the property to the lessee at the end of the lease term, (2) a bargain purchase option exists at the end of the lease, (3) the lease term is 75% or more of the life of the property, or (4) the present value of minimum lease payments equals or exceeds 90% of the fair value of the property. Enter the value of the lease property at the lower of: (1) market value, or (2) the sum of the future lease payments.

Cooperative stock (Schedule 6) is evidence of ownership in a cooperative company and a claim against the cooperative's assets and earnings. Agricultural businesses accumulate ownership in cooperatives, such as the PCA, FLB, supply cooperatives and marketing cooperatives, by doing business with the company and investing in the stock. The value should be the cost, plus the allocated equities and retains to members, or the redemption value obtained by selling the ownership interest back to the cooperative.

Investment in other entities (Schedule 6) are assets owned in other businesses for the purpose of exercising ownership and control of other enterprises. Examples include a share ownership of processing facilities, or another agricultural production enterprise. Value the investment at cost or equity value depending on the amount of control exercised in the entity.

Purchased and raised breeding animals (Schedule 7) should be separated into purchased and raised and grouped into meaningful categories by enterprise. Breeding animals that are expected to be culled in the next year should be listed in Schedule 3 - Livestock Inventory, rather than Schedule 7. For purchased animals, list the number, original cost, accumulated depreciation taken since owning the animals, adjusted cost basis or book value, net market value per head, and

total market value. Under the cash basis of accounting, raised breeding animals will have a **zero** cost basis, accumulated depreciation, and book value, since inventories are not used in filing income taxes. The adjusted cost basis for raised breeding animals, under accrual tax filing, will have an adjusted cost basis equal to the inventory value since the value of raised animals is reported as income in the year in which the animals were raised.

Machinery and equipment (Schedule 8) accounts for all depreciable machinery and equipment items. List the original cost, accumulated depreciation taken since owning the machinery, adjusted cost basis or book value, and market value. The adjusted cost basis or book value is the original cost less the accumulated depreciation taken since owning the item.

Land and improvements (Schedule 9) should be separated into nondepreciable land, and improvements on the land. The land can be separated into farms by legal description showing acres, original cost, market value per acre, and total market value. Improvements on land such as tile, buildings, fences, etc. should show the original cost, accumulated depreciation taken since owning the item, adjusted cost basis or book value, and market value. One way to estimate the market value of land and improvements is to use the assessed value (twice the state equalized value in Michigan) that is placed on the property for property tax purposes.

Other noncurrent assets not accounted for in the other categories are listed in Schedule 6.

CURRENT LIABILITIES

Current liabilities (debts) are obligations payable within one year or the normal operating cycle of the business. Current liabilities are categorized, for the Schedules, into accrued expenses, accounts payable, income tax and social security due and notes payable.

Accrued expenses (Schedule 10) are accumulating debts arising out of services rendered to the business over a period of time, but not due or paid at the time of preparing the balance sheet. Wages of employees accrue from day to day, and at any date between paydays there is an amount

of accrued wages payable, but not due until the regular payday. Accrued interest is an expense which accrues over a period of time an enterprise uses borrowed money, but is not due until after the statement date. Accrued property taxes, and rents are other examples. List those which are applicable for the business.

Accounts payable (Schedule 10) are obligations to pay for products and services that have been acquired on open account from input suppliers. List those which are applicable for the business.

Income and social security taxes payable (Schedule 10) is the liability for income and social security taxes due from the previous year for the business. If the business owner's are self-employed, include only the business share of taxes due.

Notes payable within one year (Schedule 10) are written promises to pay specific sums of money for short-term credit purchases, such as operating credit, short-term loans on machinery purchases and short-term loans on supplies purchased. List those which are applicable for the business.

NONCURRENT LIABILITIES

Noncurrent liabilities are obligations with a maturity of more than one year from the date of the statement of financial position. These liabilities arise at the time machinery and equipment, breeding livestock, land improvements or land are pledged as security for a loan. The outstanding balance of the loan is separated into the principal payment due within the next 12 months which is shown on the balance sheet as a current liability and remaining principle due beyond one year which is listed under the noncurrent liabilities section of the balance sheet. Two common categories of noncurrent liabilities are nonreal estate and real estate debts. If capital lease property is entered on Schedule 6, as an asset owned, enter the sum of the future lease payments as a liability for the business under the appropriate category of non-real estate or real estate debt, depending on

whether it is personal property or real property. The lease payment due in the next business year is listed in column (1) and the remaining payments are listed in column (2) in Schedule 11.

Nonreal estate debts (Schedule 11) are liabilities secured by nonreal estate assets. List obligations by creditor and describe the terms of each loan in adequate detail, so the total principal can be separated into the amount due within the next 12 months and the portion due beyond the next business operating cycle.

Real estate debts (Schedule 11) are liabilities secured by real estate assets. List the obligations by creditor and describe the terms of the loan in adequate detail, so the total principal can be separated into the amount due within the next 12 months and the portion due beyond the next business operating cycle.

DEFERRED INCOME TAX LIABILITY (Schedule 12)

Deferred income tax liability is an estimated amount of the future taxes on income earned and recognized for accounting purposes, but not yet included in reports for federal and state income tax purposes. The current portion of deferred taxes is an estimate of the amount due upon the sale of the current assets.

The current portion of deferred taxes results from liquidation of current assets at listed market values. Under cash basis of accounting, income taxes and social security have not been paid on the gain in marketable securities, inventories, accounts receivables, prepaid expenses and cash invested in growing crops. These items are current assets which have been listed in a prior schedule and are entered again in Schedule 12. In most cases, adjusted cost basis is zero for these items. Deductions from current assets include accrued expenses and accounts payable or those inputs which have been acquired, but not paid for in cash and deducted as a business expense in previous tax returns. Estimated federal and state income and social security (self-employment) tax rates are listed and the deferred taxes calculated on the current portion of the assets.

The noncurrent portion of deferred taxes results if breeding animals, machinery, and real estate market values are greater than the adjusted cost basis. Capital gain is the difference between market values (assumed liquidation price) and adjusted cost basis of the property. It is assumed that the market value of the noncurrent assets is reduced by the estimated value of income taxes due on the sale of the property. Schedule 13 allows a column for the calculation of deferred taxes on noncurrent assets in order to arrive at the net market value for the asset.

CONTRIBUTED CAPITAL, DEFERRED TAX LIABILITY, AND VALUATION EQUITY (Schedule 13)

Equity on the balance sheet is divided into three components: contributed capital to the business, valuation equity, and retained earnings. Contributed capital or paid-in-capital is equity that owners contributed to the business from savings, gifts, and inheritance originating from outside of the business. Contributed capital at the beginning of the year should be entered in Schedule 13. Contributions during the business year is entered on the operating schedules.

Valuation equity is capital acquired by owning assets and valuing these assets at market values rather than book values. It is calculated by subtracting deferred taxes and cost basis from the market value of the asset. Retained earnings is the equity acquired from profits, or reinvesting earnings back into the business and is assumed to be the residual owner equity after contributed capital and valuation equity is subtracted from the total owner equity.

OPERATING STATEMENTS

Transactions during the year are summarized in the statement of cash flows and the income statement. The data for these statements are entered in the operating schedules. After the operating schedules are completed transfer the totals to the appropriate financial statement.

STATEMENT OF CASH FLOWS

The cash flow statements shows from what sources cash has come into the business and what the cash has been spent on during the operating business year. The net increase (decrease) in cash during the year, plus the beginning cash balance should equal cash at the end of the year. The cash flow statement is a historical document showing cash flow activities and is categorized into operating, investing financing, and capital sections of the report.

The statement of cash flows is divided into sections according to the source of the cash as follows: 1) net cash provided by operating activities is sales less the operation expenses, 2) net cash provided by investing activities is sales less purchases of capital items, 3) net cash provided by financing activities is money borrowed less principal payments, and 4) net cash provided by capital activities is capital contributed to owner equity less capital distributed from owner equity. The increase (decrease) in cash is the addition of the above four sources of cash to the business. Cash at the end of the year is the cash at the beginning of the year, plus the change in cash from all business activities.

INCOME STATEMENT

The income statement shows the financial transactions used in arriving at the firm's net earnings for the accounting period. Revenue is listed for crops, livestock, livestock products, and other sources. Cash sales of products are adjusted for any change in inventory of the products. For example, crop sales for the year include a change in crop and feed inventory and the change in cash invested in growing crops to arrive at a gross revenue from crops.

The inventory adjustments are required so the crops held in storage are credited to the current year's production and the previous year's production, that is sold in the current year, is removed from the current year's income statement. The inventory adjustments are found on the

balance sheet and calculated by subtracting the beginning inventory value from the ending inventory value.

Gross revenue is the addition of the gross revenue from crops, market livestock, raised breeding stock, livestock products, other income, and the change in accounts receivable. Value of farm production is gross revenue less the cost of livestock for resale or feeder livestock purchased.

Expenses include depreciation, interest, family labor salaries, and other cash operating expenses. Other cash operating expenses are most the expenses of doing business. They are not detailed on the income statement, because the data are not required for calculation of the financial ratios, but may be listed on a separate sheet of paper if the detail is desired. Total expenses include the above items, plus changes in supplies and prepaid expenses, accrued expenses, and accounts payable. The adjustments to expenses are obtained from the balance sheet by subtracting ending inventory values from the beginning value for each item listed.

Net farm income from operations is the value of farm production less the total expenses. Net earnings before taxes is the net farm income from operations, plus the gains or losses on the sale of farm capital assets. Capital assets include purchased breeding livestock, machinery and equipment, buildings, land, and other noncurrent assets, except raised breeding livestock which are listed as a revenue source on the income statement.

Taxes are subtracted from net earnings before taxes to arrive at net earnings. Social Security taxes include the self-employment taxes for the owner-operators, not the taxes paid on hired employees. Employee Social Security taxes should be taken into account in labor expenses. The income and Social Security tax changes are obtained from the appropriate category on the balance sheet by subtracting the ending value from the beginning value.

COMPLETING THE OPERATING SCHEDULES

Sale of crops (Schedule 14) is a listing of the crops sold during the accounting period with a description of the crop, quantity sold, price received per unit and the total sales.

Sale of livestock and products (Schedule 15) is a listing of market livestock, livestock products, and raised breeding animals sold during the year with a description, quantity sold, price received per unit and total sales.

Other income from operations (Schedule 16) details other sources of sales for the business.

Expenses from operations (Schedule 17) captures cash expenses, plus depreciation expenses for the accounting period. Detail expenses into the following categories: cost of livestock for resale such as feeder cattle or hogs; interest; depreciation of machinery and equipment, buildings and land improvements, and breeding livestock; family labor draw or salary; income taxes and social security paid; and all other cash operating expenses.

Other cash investing and financing items (Schedule 18) includes the sale of capital items, purchase of capital items, money borrowed, principal payments, and changes to equity capital. Detail the sale or purchase of capital items to the appropriate noncurrent asset categories. Money borrowed and principal payments are segmented into short-term loans, nonreal estate and real estate loans appearing on the balance sheet. Equity capital contributions and distributions should reflect only cash received or distributed to owners from sources outside business activities. Capital contributions could be from personal savings, gifts, or inheritances that are contributed to the business. Capital distributions to owners should be those which are over and above family labor draw or salary.

RECONCILIATION OF OWNER EQUITY

The reconciliation of owner equity statement summarizes the change of owner equity into the amount received from net earnings, change in capital contributions and distributions, and change

in valuation equity. The owner equity at the beginning of the year, plus additions during the year should equal owner equity at the end of the period that is shown on the balance sheet. If it doesn't, there is an error in the records.

The following methods can be used to evaluate the statements for accuracy and consistency:

- a. Reconcile cash between the checking account balances, balance sheet cash values, and the statement of cash flows values.
- b. Reconcile net earnings between the income statement and the balance sheet change in retained earnings for the beginning and end of the accounting period.
- c. Reconcile the balance sheet items with the statement of cash flows, such as changes in debts with the funds borrowed and repaid, and the noncurrent asset values with capital purchases, and depreciation.

FINANCIAL MEASURES AND RATIOS

One of the most important tasks of the financial manager is the planning function. In order to make plans, the manager must first be able to use financial data to analyze a firm's past performance and determine its current financial position.

Financial position refers to total resources controlled by a business and total claims against those resources, at a single point in time. Measures of financial position provide an indication of the capacity of the business to withstand income variation and provides a benchmark for evaluation of future business decisions. Financial performance refers to the results of production and financial decisions, over one or more periods of time.

Specifically, the analysis is intended to help evaluate past financial performance regarding profitability, efficiency, and risk to determine if financial objectives are being achieved. More important than historical analysis is the projection of future financial performance which can be

compared with historical results. The farmer must demonstrate to a lender that capital will be utilized in a profitable venture and interest and principal payments will be made.

WHY USE RATIOS

Analysts employ financial ratios because numbers in isolation have limited value. For example, what information is provided by knowing that net income for a firm is \$50,000? Given an income number, an analyst would want to know the sales figure that generated the net income and the assets employed in generating the sales and the net income. Therefore, ratios are used to provide meaningful relationships between individual values in the financial statements.

Because there are numerous individual items in financial statements, there is a substantial number of potential combinations. The analyst must limit the examination to the relevant ratios and categorize the ratios into groups that provide information on alternative economic aspects of the firm's operation. Ratios presented in this paper are those recommended by the "Farm Financial Standards Task Force".² Five financial criteria are recommended in the report: liquidity, solvency, profitability, repayment capacity, and financial efficiency. Financial measures are recommended for each criterion.

The financial measures and ratios should be calculated for the business and entered on the form. The financial measures and ratios form provides a column to enter the financial goals for the business. The goals can be obtained from industry standards, business aims, or averages for the industry. The following section defines how the ratios are calculated. The data are obtained from the balance sheet, income statement, and statement of cash flows.

² Recommendations of the Farm Financial Standards Task Force, The American Bankers Association, Washington, D.C. The task force was a cooperative effort of the American Bankers Association, the Extension Service of the USDA, the Farm Foundation, and the Farm Credit System.

LIQUIDITY

Liquidity measures the ability of a farm business to meet financial obligations as they come due in the ordinary course of business, without disrupting the normal operations of the business. The recommended measures are the current ratio and the amount of working capital.

Current ratio

Computation: *total current assets* \div *total current liabilities*

The current ratio indicates the extent to which current assets, if liquidated, would cover current liabilities. If the ratio is greater than one, the business is considered liquid. If the ratio is less than one, the business is considered not liquid.

The ratio is a stock concept of financial resources available at a given point in time to meet obligations at that point in time. It does not measure or predict the timing of future fund flows, nor does it measure the adequacy of future fund inflows in relation to outflows.

An unusually low current ratio indicates that a firm may face some difficulty in meeting its bills without cash inflows from product sales or short-term borrowing of operating credit to assure timely payment of obligations during the period.

An unusually high current ratio suggest that funds are not being used economically within the firm. There may be excessive amounts of inventory on hand, excessive accounts receivables, or large idle cash balances. A high current ratio may reflect the absence of debt payment obligations, few accounts payable, and an unusually strong financial position for the firm. Large idle cash balances may provide opportunities for greater investment in the business or longer-term non-farm investments.

Working capital

Computation: *total current assets - total current liabilities*

Working capital is the firm's potential reservoir of cash. It is the amount of funds available to purchase inputs and inventory items, or make advance payments on debts. The amount of working capital considered adequate must be related to the size of the business and the need for financial reserves in the business.

SOLVENCY

Solvency measures the amount of borrowed funds used by a business relative to the amount of owner's equity. Debt is interest bearing and has a date by which it must be paid. Therefore, solvency measures provide an indication of the firm's ability to repay all indebtedness, if all assets were sold and an indication of the ability to continue operations as a viable business after a financial adversity which results in increased debt or reduced equity. Recommended solvency measures are the debt to asset, equity to asset, and leverage ratios.

A reasonable standard for solvency ratios varies from one type of enterprise to another and from one borrower to another. There is no single standard which is ideal for all types of farm businesses. The range of acceptable values will vary depending on income variability, risk associated with normal production, and fluctuation in farm asset values that may occur due to agricultural or non-agricultural purposes.

Debt to asset ratio

Computation: *total liabilities ÷ total assets*

The debt to asset ratio measures the financial position of the business. It compares total debt obligations owed against the value of total assets. This ratio expresses what proportion of total

assets is owed to creditors or the creditor's claims against the operation. It is one way to express the financial risk exposure of the farm business. Higher debt ratios indicate greater financial risk.

Equity to asset ratio

Computation: *total equity* \div *total assets*

The equity to asset ratio measures financial position of the business. It measures the proportion of total assets financed by owner equity or the owner's claim against the operation. The higher the value of the ratio, the more total capital supplied by the owners and less by the creditors. A higher equity ratio indicates less financial risk and a lower probability of the firm defaulting on the debt.

Leverage ratio

Computation: *total liabilities* \div *total equity*

The leverage ratio measures financial position of the business. It reflects the extent to which debt is being combined with equity capital. The higher the value of the ratio, the more total capital supplied by the creditors and less by the owners. A higher ratio indicates greater financial risk, less chance of securing additional borrowed funds, and a greater probability of the firm defaulting on the debt during periods of decreased profit margins.

PROFITABILITY

Profitability measures the extent to which a business generates a profit from the use of land, labor, capital, and management. Three profitability measures recommended are the rate of return on assets, rate of return on equity, and net income.

Rate of return on assets (ROA)

Computation: $(\text{net earnings} + \text{interest expense}) \div \text{average total assets}$

Average total assets is calculated by adding the beginning and ending total assets and dividing by 2. Rate of return on assets is often used as an overall index of profitability. The higher the value, the more profitable the farming operation.

Rate of return on equity (ROE)

Computation: $\text{net earnings} \div \text{average total equity}$

Average total equity is calculated adding the beginning and ending total equity and dividing by 2. This ratio measures the rate of return on equity capital employed in the business. The higher the value, the more profitable the farming operation.

Net farm income (NFI)

Computation: $\text{value of farm production} - \text{expenses}$

Net farm income is the return to the family for unpaid labor, management and owner's equity. The measure is an absolute amount, so it is difficult to compare the measure across farm businesses, without considering business size, type, and other factors.

REPAYMENT CAPACITY

Repayment capacity measures the ability of borrowers to repay debt from income. Principal payments on term loans must come from net income, with depreciation added back, after a withdrawal for family living and income and social security taxes. Repayment capacity measures recommended are the term debt and capital lease coverage ratio and capital replacement and term debt repayment margin.

Term debt and capital lease coverage ratio

Computation: $(\text{net earnings} + \text{depreciation expense} + \text{interest on term debt}) \div$
 $(\text{annual scheduled principal and interest payments on term debt} + \text{annual scheduled}$
 $\text{payments on capital leases})$

The ratio provides a measure of the ability of the business to cover all term debt and capital lease payments. If non-farm income is allocated to paying business debt obligations, the nonfarm sources of income used for this purpose must be added to the computation. The greater the ratio, over 1:1, the greater the margin to cover payments.

Capital replacement and term debt repayment margin

Computation: $\text{net earnings} + \text{depreciation} - \text{principal payments on current}$
 $\text{portions of term debt} - \text{principal payments on current portions of capital leases}$

This measure enables borrowers and lenders to evaluate the ability of the farm proprietor to generate funds necessary to repay debts, which have maturity dates longer than one year, and to replace capital assets. The measure also enables users to evaluate the ability to acquire capital or service additional debt and to evaluate the risk margin for capital replacement and debt service. This measure assumes that credit obtained for current year operating expenses will be repaid in one year as a result of normal conversion of farm production to cash.

The measure is an absolute amount, so it is difficult to compare this measure between farm businesses. The appropriate margin will vary from farm to farm depending on the production and price variability associated with the enterprises, the degree of diversification of enterprises, and the financial and risk management abilities of the manager.

FINANCIAL EFFICIENCY

Financial efficiency measures the degree of effectiveness in the use of land, labor, capital, and management. A farm business has two ways to increase profits, either by increasing profit per unit produced or by increasing volume of production. This is illustrated by a relationship that exists between the rate of return on assets, asset turnover ratio and operating profit margin ratio. If the asset turnover ratio is multiplied by the operating profit margin ratio, the result is the rate of return on assets. The higher the asset turnover ratio or the operating profit margin ratio, the more efficiently assets are being used to generate revenue. Financial efficiency measures recommended are the asset turnover ratio, operating profit margin ratio, and operational ratios.

Asset turnover ratio

Computation: $\text{value of farm production} \div \text{average total assets}$

The asset turnover ratio is a measure of how efficiently assets are being used to generate revenue.

Operating profit margin ratio

Computation: $(\text{net farm income from operations} + \text{interest expense}) \div \text{value of farm production}$

This ratio measures financial efficiency in terms of return per dollar of gross revenue.

Operational ratios

Four ratios reflect the composition of gross revenues. The sum of the first three expresses total farm expenses per dollar of gross revenue.

Operating expense ratio

Computation: $(\text{total expenses} - \text{depreciation expense} - \text{interest expense}) \div \text{value of farm production}$

Depreciation expense ratio

Computation: $\text{depreciation expense} \div \text{value of farm production}$

Interest expense ratio

Computation: $\text{interest expense} \div \text{value of farm production}$

Net farm income from operations ratio

Computation: $\text{net farm income from operations} \div \text{value of farm production}$

Financial ratios can be a very valuable tool in the analysis of financial statements. However, in order to derive maximum benefit from financial ratios, the number must be compared with a standard which is derived from the firm's industry or management's objectives. A firm's performance over time can determine if the business is progressing or regressing by comparing its profit margins or return on equity to past periods. Also, it is important for the analyst to determine what the ratio is supposed to show, rather than to concentrate on the ratios or percentages as ends in themselves. Financial measures are simply a convenient way to evaluate large amounts of financial data and turn it into information that can be used in future decision making.

E X A M P L E

BALANCE SHEET SCHEDULES

NAME: Test Case Dairy

BALANCE SHEET DATE: January 1, 199x

SCHEDULE 1: MISCELLANEOUS CURRENT ASSETS				
DESCRIPTION	VALUE			
Cash/Checking	2,766			
Savings Accounts	1,500			
Marketable Securities	2,250			
Accounts Receivables	8,312			
OTHER CURRENT ASSETS				
Hedging Account	828			
Total Other Current Assets				
				828

SCHEDULE 2: CROP AND FEED INVENTORY				
DESCRIPTION	UNIT	(1) QUANTITY	(2) PRICE/UNIT	VALUE (1X2)
CORN	Bu.	8,036	2.63	21,135
CORN Silage	TON	150	15.00	2,250
Hay	TON	666	60.00	39,960
Other		555	1.00	555
Total Crop and Feed Inventory				
				63,900

SCHEDULE 3: LIVESTOCK (HELD FOR SALE) INVENTORY				
DESCRIPTION	UNIT	(1) QUANTITY	(2) PRICE/UNIT	VALUE (1X2)
Dairy Cows	Head	9	500	4,500
Total Livestock Inventory				
				4,500

SCHEDULE 4: SUPPLIES INVENTORY AND PREPAID EXPENSES				
DESCRIPTION	UNIT	(1) QUANTITY	(2) PRICE/UNIT	VALUE (1X2)
Seed	Bu.	40	20	800
Total Supplies Inventory and Prepaid Expenses				
				800

1/1/9x

SCHEDULE 5: CASH INVESTED IN GROWING CROPS

CROP	(1) ACRES	(2) \$/ACRE	VALUE (1X2)
<i>wheat</i>	<i>23</i>	<i>60</i>	<i>1,380</i>
Total Cash Invested in Growing Crops			<i>1,380</i>

SCHEDULE 6: MISCELLANEOUS NONCURRENT ASSETS

DESCRIPTION	VALUE
Capital Lease	
Cooperative Stock	<i>11,995</i>
Investment in Other Entities	
OTHER NONCURRENT ASSETS	
Total Other Noncurrent Assets	

SCHEDULE 7: PURCHASED AND RAISED BREEDING ANIMALS

DESCRIPTION	(1) Number	(2) Cost Basis	(3) Accu. Depr.	Adj. Cost (2-3)	(4) Mkt/Head	VALUE (1X4)
PURCHASED BREEDING STOCK						
<i>Bull</i>	<i>1</i>	<i>900</i>	<i>64</i>	<i>836</i>	<i>836</i>	<i>836</i>
Total Purchased				<i>836</i>	<i>836</i>	<i>836</i>
RAISED BREEDING STOCK						
<i>Cows</i>	<i>81</i>				<i>1,000</i>	<i>81,000</i>
<i>Bred Heifers</i>	<i>20</i>				<i>850</i>	<i>17,000</i>
<i>Heifers</i>	<i>50</i>				<i>400</i>	<i>20,000</i>
<i>Calves</i>	<i>25</i>				<i>150</i>	<i>3,750</i>
Total Raised						<i>121,750</i>

SCHEDULE 8: MACHINERY AND EQUIPMENT

DESCRIPTION	(1) Cost Basis	(2) Acc. Depr.	Adj. Cost (1-2)	Market Value
Total Machinery and Equipment	<i>224,704</i>	<i>185,779</i>	<i>38,925</i>	<i>78,000</i>

1/1/9x

SCHEDULE 9: LAND AND IMPROVEMENTS

DESCRIPTION	(1) Acres	(2) Cost Basis	(3) Acc. Depr	Adj. Cost (2-3)	(4) Mkt/ Acre	Total Mkt. (1x4)
LAND						
Home farm	160	75,000			800	128,000
Jones farm	118	22,609			400	47,200
Peters farm	70	27,400			450	31,500
Jopson farm	20	7,695			515	10,300
Back 40	40	18,000			500	20,000
Total Land	408	150,704				237,000
IMPROVEMENTS						
Buildings		97,010	46,933	50,077		50,077
Total Improvements		97,010	46,933	50,077		50,077

SCHEDULE 10: CURRENT LIABILITIES

ACCRUED EXPENSES	VALUE
Wages	
Interest	8,365
Property Taxes	6,762
Rent	
Other	
Total Accrued Expenses	15,127
ACCOUNTS PAYABLE	
Total Accounts Payable	
Income Taxes and Social Security	9,909
Notes Due Within 1 year	
Friendly Lender	4,447
Total Notes Due Within One Year	4,447

SCHEDULE 11: NONCURRENT LIABILITIES

Creditor & Purpose	No. of Payments Remaining	No. of Payments Per Year	Interest Rate	Periodic Payment Amount	(1) Prin. Due 12 Months	(2) Non Current Principal	Total Principal (1+2)
NON REAL ESTATE DEBT							
Lender #1 -- Mach.	48	12	12%	997	7,842	30,012	37,854
Lender #2 -- Mach.	36	12	10.5%	1,310	12,054	28,240	40,294
Total Non Real Estate Debt					19,896	58,252	78,148
REAL ESTATE DEBT							
Land Lender -- Land	15	1	9.5%	10,458	2,688	99,411	82,099
Land Contract -- Land	12	1	8%	5,563	2,209	39,714	41,923
Total Real Estate Debt					4,897	119,125	124,022

11/1/9x

SCHEDULE 12: DEFERRED CURRENT TAX LIABILITY

CURRENT ASSETS	(1) Mkt. Value	(2) Cost Basis	Difference (1-2)
Marketable Securities (1) *	2,250	1,895	355
Accounts Receivables (1)	8,312		8,312
Crop and Feed Inventory (2)	63,900		63,900
Livestock Inventory (3)	4,500		4,500
Supplies and Prepaid Expenses (4)	800		800
Cash Investment in Growing Crops (5)	1,380		1,380
(a) Total Difference: Tax Basis of Current Assets			79,247
CURRENT LIABILITIES	VALUE		
Accrued Expenses (10)			15,127
Accounts Payable (10)			
(b) Total Liabilities			15,127
(c) Deferred Taxable Income Related to Current Assets/Liabilities (a-b)			64,120
(d) Estimated Federal & State Income & Soc. Security Tax Rate			34.9%
Total Deferred Tax Expense Related to Current Assets/Liabilities (cxd)			22,378

SCHEDULE 13: CONTRIBUTED CAPITAL, DEFERRED TAX LIABILITY, AND VALUATION EQUITY

Contributed Capital						30,000
(e) Estimated Federal & State Income Tax Rate						19.6%
NON-CURRENT ASSETS	(1) Mkt. Value	(2) Cost Basis	(3) Difference (1-2)	(4) Deferred Tax (3xe)	(5) Net Mkt Value (1-4)	Valuation Equity (5-2)
Purchased Breeding Stock (7)	836	836			836	
(f) Raised Breeding Stock (7)	121,750	—	121,750	23,863	97,887	97,887
Machinery and Equipment (8)	78,000	38,925	39,075	7,659	70,341	31,416
Land (9)	237,000	150,701	86,296	16,914	220,086	69,382
Improvements (9)	50,077	50,077			50,077	
(g) Total			247,121	48,436	439,227	198,685
Total Valuation Equity, Less Raised Breeding Stock (g-f)						100,798

* The numbers after the asset and liability items are the schedule number where the data are obtained.

BALANCE SHEET SCHEDULES

NAME: Test Case Dairy

BALANCE SHEET DATE: December 31, 199x

SCHEDULE 1: MISCELLANEOUS CURRENT ASSETS				
DESCRIPTION		VALUE		
Cash/Checking		1,511		
Savings Accounts		1,386		
Marketable Securities		2,250		
Accounts Receivables		8,215		
OTHER CURRENT ASSETS				
<u>Hedging Account</u>		942		
Total Other Current Assets		942		

SCHEDULE 2: CROP AND FEED INVENTORY				
DESCRIPTION	UNIT	(1) QUANTITY	(2) PRICE/UNIT	VALUE (1X2)
<u>Corn</u>	<u>Bu.</u>	<u>8,036</u>	<u>2.63</u>	<u>21,135</u>
<u>Corn Silage</u>	<u>Ton</u>	<u>150</u>	<u>15.00</u>	<u>2,250</u>
<u>Hay</u>	<u>Ton</u>	<u>684</u>	<u>60.00</u>	<u>41,040</u>
<u>Other</u>		<u>405</u>	<u>1.00</u>	<u>405</u>
Total Crop and Feed Inventory				<u>64,830</u>

SCHEDULE 3: LIVESTOCK (HELD FOR SALE) INVENTORY				
DESCRIPTION	UNIT	(1) QUANTITY	(2) PRICE/UNIT	VALUE (1X2)
<u>Dairy Cows</u>	<u>Head</u>	<u>10</u>	<u>500</u>	<u>5,000</u>
Total Livestock Inventory				<u>5,000</u>

SCHEDULE 4: SUPPLIES INVENTORY AND PREPAID EXPENSES				
DESCRIPTION	UNIT	(1) QUANTITY	(2) PRICE/UNIT	VALUE (1X2)
<u>Gas</u>	<u>gal</u>	<u>600</u>	<u>.79</u>	<u>474</u>
Total Supplies Inventory and Prepaid Expenses				<u>474</u>

12/31/9x

SCHEDULE 5: CASH INVESTED IN GROWING CROPS

CROP	(1) ACRES	(2) \$/ACRE	VALUE (1X2)
<i>Wheat</i>	<i>23</i>	<i>60</i>	<i>1380</i>
Total Cash Invested in Growing Crops			<i>1380</i>

SCHEDULE 6: MISCELLANEOUS NONCURRENT ASSETS

DESCRIPTION	VALUE
Capital Lease	
Cooperative Stock	<i>11,995</i>
Investment in Other Entities	
OTHER NONCURRENT ASSETS	
Total Other Noncurrent Assets	

SCHEDULE 7: PURCHASED AND RAISED BREEDING ANIMALS

DESCRIPTION	(1) Number	(2) Cost Basis	(3) Accu. Depr.	Adj. Cost (2-3)	(4) Mkt/Head	VALUE (1X4)
PURCHASED BREEDING STOCK						
<i>Bull</i>	<i>1</i>	<i>700</i>	<i>50</i>	<i>650</i>	<i>650</i>	<i>650</i>
Total Purchased						
RAISED BREEDING STOCK						
<i>Cows</i>	<i>83</i>				<i>1,000</i>	<i>83,000</i>
<i>Bred Heifers</i>	<i>30</i>				<i>850</i>	<i>25,500</i>
<i>Heifers</i>	<i>30</i>				<i>400</i>	<i>12,000</i>
<i>Calves</i>	<i>25</i>				<i>150</i>	<i>3,750</i>
Total Raised						<i>124,250</i>

SCHEDULE 8: MACHINERY AND EQUIPMENT

DESCRIPTION	(1) Cost Basis	(2) Acc. Depr.	Adj. Cost (1-2)	Market Value
Total Machinery and Equipment	<i>253,150</i>	<i>207,847</i>	<i>45,303</i>	<i>90,000</i>

12/31/9x

SCHEDULE 9: LAND AND IMPROVEMENTS

DESCRIPTION	(1) Acres	(2) Cost Basis	(3) Acc. Depr	Adj. Cost (2-3)	(4) Mkt/ Acre	Total Mkt. (1x4)
LAND						
Home farm	160	75,000			800	128,000
Jones farm	118	22,609			400	47,200
Peters farm	70	27,400			450	31,500
Jepson farm	20	7,695			515	10,300
Beck 40	40	18,000			500	20,000
Total Land	408	150,704				237,000
IMPROVEMENTS						
Buildings		97,010	50,865	46,145		46,145
Total Improvements		97,010	50,865	46,145		46,145

SCHEDULE 10: CURRENT LIABILITIES

ACCRUED EXPENSES	VALUE
Wages	
Interest	8,365
Property Taxes	6,762
Rent	
Other	
Total Accrued Expenses	15,127
ACCOUNTS PAYABLE	
Total Accounts Payable	
Income Taxes and Social Security	11,000
Notes Due Within 1 year	
Total Notes Due Within One Year	

SCHEDULE 11: NONCURRENT LIABILITIES

Creditor & Purpose	No. of Payments Remaining	No. of Payments Per Year	Interest Rate	Periodic Payment Amount	(1) Prin. Due 12 Months	(2) Non Current Principal	Total Principal (1+2)
NON REAL ESTATE DEBT							
Lender #1 -- Mack	36	12	12%	1,551	13,750	32,953	46,703
Lender #2 -- Mack	24	12	10.5%	1,167	11,925	13,240	25,165
Total Non Real Estate Debt					25,675	46,193	71,868
REAL ESTATE DEBT							
Land Lender -- Land	14	1	9.5%	9,821	2,756	71,606	74,362
Land Contract -- Land	11	1	8%	5,489	2,354	36,831	39,185
Total Real Estate Debt					5,110	108,437	113,547

12/31/9x

SCHEDULE 12: DEFERRED CURRENT TAX LIABILITY

CURRENT ASSETS	(1) Mkt. Value	(2) Cost Basis	Difference (1-2)
Marketable Securities (1) *	2,250	1,895	355
Accounts Receivables (1)	8,215		8,215
Crop and Feed Inventory (2)	64,830		64,830
Livestock Inventory (3)	5,000		5,000
Supplies and Prepaid Expenses (4)	474		474
Cash Investment in Growing Crops (5)	1,380		1,380
(a) Total Difference: Tax Basis of Current Assets			80,254
CURRENT LIABILITIES	VALUE		
Accrued Expenses (10)			15,127
Accounts Payable (10)			
(b) Total Liabilities			15,127
(c) Deferred Taxable Income Related to Current Assets/Liabilities (a-b)			65,127
(d) Estimated Federal & State Income & Soc. Security Tax Rate			34.9 %
Total Deferred Tax Expense Related to Current Assets/Liabilities (cxd)			22,729

SCHEDULE 13: CONTRIBUTED CAPITAL, DEFERRED TAX LIABILITY, AND VALUATION EQUITY

Contributed Capital						30,000
(e) Estimated Federal & State Income Tax Rate						19.6 %
NON-CURRENT ASSETS	(1) Mkt. Value	(2) Cost Basis	(3) Difference (1-2)	(4) Deferred Tax (3xe)	(5) Net Mkt Value (1-4)	Valuation Equity (5-2)
Purchased Breeding Stock (7)	650	650			650	
(f) Raised Breeding Stock (7)	124,250	-	124,250	24,353	99,897	99,897
Machinery and Equipment (8)	90,000	45,303	44,697	8,761	81,239	35,936
Land (9)	237,000	150,704	86,296	16,914	220,086	69,382
Improvements (9)	46,145	46,145			46,145	
(g) Total			253,243	50,028	448,017	205,215
Total Valuation Equity, Less Raised Breeding Stock (g-f)						105,318

* The numbers after the asset and liability items are the schedule number where the data are obtained.

OPERATING SCHEDULES

NAME: Test Case Dairy

OPERATING YEAR: 199x

SCHEDULE 14: SALE OF CROPS				
DESCRIPTION	UNIT	(1) QUANTITY	(2) PRICE/UNIT	VALUE (1X2)
<u>wheat</u>	<u>Bu.</u>	<u>1,299</u>	<u>2.85</u>	<u>3,702</u>
Total Sale of Crop				<u>3,702</u>
SCHEDULE 15: SALE OF LIVESTOCK AND PRODUCTS				
DESCRIPTION	UNIT	(1) QUANTITY	(2) PRICE/UNIT	VALUE (1X2)
Market Livestock <u>Dairy Steer</u>	<u>Head</u>	<u>1</u>	<u>510</u>	<u>510</u>
Livestock Products <u>Milk</u>	<u>Cwt</u>	<u>15,153</u>	<u>13.54</u>	<u>205,172</u>
Raised Breeding Animals <u>Dairy Cows</u>	<u>Head</u>	<u>9</u>	<u>553</u>	<u>4,977</u>
Total Sale of Livestock & Products				<u>210,659</u>
SCHEDULE 16: OTHER INCOME FROM OPERATIONS				
DESCRIPTION				VALUE
Cooperative Distributions				
Agricultural Program Payments				<u>8,301</u>
Custom Hire				<u>2,711</u>
Property Tax Refunds				<u>6,138</u>
Other Refunds				
Other				
Total Other Income from Operation				<u>17,150</u>
SCHEDULE 17: EXPENSES FROM OPERATION				
DESCRIPTION				VALUE
Cost of Livestock for Resale				
Interest				<u>17,536</u>
Depreciation - Machinery & Equipment				<u>19,532</u>
- Buildings and Improvements				<u>3,932</u>
- Breeding Livestock				<u>114</u>
Family Labor Draw or Salary				<u>24,000</u>
Income and Social Security Taxes				<u>9,909</u>
Other Operating Expenses				<u>134,368</u>

SCHEDULE 18: OTHER CASH INVESTING AND FINANCING ITEMS	
	VALUE
SALE OF CAPITAL ITEMS	
Breeding Livestock	659
Machinery and Equipment	
Land	
Land Improvements	
PURCHASE OF CAPITAL ITEMS	
Breeding Livestock	700
Machinery and Equipment	25,910
Land	
Land Improvements	
MONEY BORROWED	
Notes Due Within One Year	
Operating Loans	11,494
Non-Real Estate Term Loans	25,910
Real Estate Term Loans	
PRINCIPLE PAYMENTS	
Notes Due Within One Year	4,447
Operating Loans	11,494
Scheduled Payments - NonReal Estate Debt	19,896
Unscheduled Payments - NonReal Estate Debt	12,294
Scheduled Payments - Real Estate Debt	4,897
Unscheduled Payments - Real Estate Debt	5,578
EQUITY CAPITAL	
Contributions from Owners	
Distributions to Owners	

FINANCIAL STATEMENTS

NAME: Test Case Dairy

Fiscal Year: 199x

STATEMENT 1: BALANCE SHEET					
ASSETS		Beginning Date	Ending Date	LIABILITIES	
CURRENT		1/1/9x	12/31/9x	CURRENT	1/1/9x 12/31/9x
Cash/Checking Accounts (1) *		2,966	1,511	Accrued Expenses (10)	15,127 15,127
Savings Accounts (1)		1,500	1,386	Accounts Payable (10)	
Marketable Securities (1)		2,250	2,250	Income Tax & Social Security (10)	9,909 11,000
Accounts Receivables (1)		8,312	8,215	Notes Due Within One year (10)	4,441
Crop & Feed Inventory (2)		63,900	64,830	NonReal Estate Principal Due (11)	19,896 25,675
Livestock Inventory (3)		4,500	5,000	Real Estate Principal Due (11)	4,897 5,110
Supplies Inventory & Prepaid Expenses (4)		800	474	Deferred Taxes (Current Items) (12)	22,378 22,729
Cash Invested in Growing Crops (5)		1,380	1,380		
Other Current Assets (1)		828	942		
Total current Assets		86,436	85,987	Total Current Liabilities	76,654 79,641
NONCURRENT				NONCURRENT	
Purchased Breeding Animals (13)		836	650	NonReal Estate Loans (11)	58,252 46,193
Raised Breeding Animals (13)		97,887	99,897	Real Estate Loans (11)	119,125 108,437
Machinery & Equipment (13)		70,341	81,239		
Capital Leases (6)				Total NonCurrent Liabilities	177,377 154,630
Cooperative Stock (6)		11,995	11,995		
Investments in Other Entities (6)				(b) Total Liabilities	254,031 234,271
Improvements (13)		50,077	46,145	(c) Contributed Capital (13)	30,000 30,000
Land (13)		220,086	220,086	(d) Valuation Equity (13)	100,798 105,318
Other Noncurrent Assets (6)				Retained Earnings (e-c-d)	152,829 176,410
Total Noncurrent Assets		451,222	460,012	(e) OWNER EQUITY (a-b)	283,627 311,729
(a) Total Assets		537,658	546,000	Total Liabilities and Equity (b+e)	537,658 546,000

* The numbers after the asset and liability item are the schedule numbers where the data are obtained.

STATEMENT 2: STATEMENT OF CASH FLOWS	
	VALUE
Sale of Crops (14) *	3,702
Sale of Livestock and Products (15)	210,659
Other Income from Operations (16)	17,150
Total Sales	231,511
Cost of Livestock for Resale (17)	
Net Sales	231,511
Interest (17)	17,536
Family Labor Draw (17)	24,000
Income and Social Security Taxes (17)	9,909
Other Operating Expenses (17)	134,368
NET CASH PROVIDED BY OPERATING ACTIVITIES	45,698
Sale of Capital Items (18)	659
Purchase of Capital Items (18)	26,610
NET CASH PROVIDED BY INVESTING ACTIVITIES	- 25,951
Money Borrowed (18)	37,404
Principal Payments (18)	58,606
NET CASH PROVIDED BY FINANCING ACTIVITIES	- 21,202
Capital Contributions (18)	
Capital Distributions (18)	
NET CASH PROVIDED BY CAPITAL ACTIVITIES	
Net Increase (Decrease) in Cash	- 1,455
Cash at Beginning of Year	2,966
Cash at End of Year	1,511

* The numbers after the cash flow items are the schedule number where the data are obtained.

STATEMENT 3: INCOME STATEMENT	
REVENUE	VALUE
Crop Cash Sales (14) *	3,702
+/- Change in Crop and Feed Inventory (Balance Sheet: Ending-Beginning Value)	930
+/- Change in Cash Invested in Growing Crops (Balance Sheet: Ending-Beginning Value)	
Gross Revenues from Crops	4,632
Market Livestock Sales (15)	510
+/- Change in Market Livestock Inventory (Balance Sheet: Ending-Beginning Value)	500
Gross Revenues from Market Livestock	1,010
Sale of Raised Breeding Animals (15)	4,977
+/- Change in Raised Breeding Stock Inventory (Balance Sheet: Ending-Beginning Value)	2,010
Gross Revenue from Raised Breeding Stock	6,987
Livestock Products (15)	205,172
Other Income (16)	17,150
+/- Change in Accounts Receivable (Balance Sheet: Ending-Beginning Value)	- 97
GROSS REVENUE	234,854
Less Cost of Livestock for Resale (17)	
VALUE OF FARM PRODUCTION	234,854
EXPENSES	
Depreciation (17)	23,578
Interest (17)	17,536
Family Labor Draw or Salary (17)	24,000
Other Cash Operating Expenses (17)	134,368
+/- Change in Supplies and Prepaid Expenses (Balance Sheet: Beginning-Ending Value)	326
+/- Change in Accrued Expenses (Balance Sheet: Ending-Beginning Value)	
+/- Change in Other Accounts Payable (Balance Sheet: Ending-Beginning Value)	
TOTAL EXPENSES	199,808
NET FARM INCOME from Operations	35,046
Gains/Loss on Sale of Farm Capital Assets	- 113
NET EARNINGS before Taxes	34,933
Income and Social Security Taxes (17)	9,909
+/- Change in Income and SS Payable (Balance Sheet: Ending-Beginning Value)	1,091
+/- Change in Current Deferred Taxes (Balance Sheet: Ending-Beginning Value)	351
Income Tax Expense	11,351
NET EARNINGS	23,581

* The number after the cash flow items are the schedule number where the data are obtained.

STATEMENT 4: RECONCILIATION OF OWNER EQUITY			
			VALUE
Owner Equity, Beginning of Period (Balance Sheet)			283,627
Net Earnings (Income Statement)			23,581
Change in Contributed Capital (Balance Sheet: Ending-Beginning Value)			
Change in Valuation Equity (Balance Sheet: Ending-Beginning Value)			4,520
OWNER EQUITY, END OF PERIOD: (Balance Sheet)			311,729
FINANCIAL MEASURES AND RATIOS			
LIQUIDITY	Beginning Date	Ending Date	GOAL
Current Ratio	1.13	1.08	1.30
Working Capital	9,782	6,346	7,615
SOLVENCY			
Debt/Asset Ratio (Percent)	47	43	34
Equity/Asset Ratio (Percent)	53	57	66
Leverage Ratio	.9	.8	.9
PROFITABILITY			
Rate of Return on Assets (ROA)		7.59	9.11
Rate of Return on Equity (ROE)		7.92	9.51
Net Farm Income (NFI)		35,046	42,055
Net Earnings		23,581	28,298
REPAYMENT CAPACITY			
Debt Coverage Ratio		1.4	1.7
Capital/Debt Repayment Margin		17,919	21,503
FINANCIAL EFFICIENCY			
Asset Turnover Ratio (Percent)		43	52
Operating Profit Margin Ratio (Percent)		22	27
Operating Expense Ratio (Percent)		68	54
Depreciation Expense Ratio (Percent)		10	8
Interest Expense Ratio (Percent)		7	6
Net Farm Income Ratio (Percent)		15	18

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BALANCE SHEET SCHEDULES

NAME: _____

BALANCE SHEET DATE: _____

SCHEDULE 1: MISCELLANEOUS CURRENT ASSETS				
DESCRIPTION		VALUE		
Cash/Checking				
Savings Accounts				
Marketable Securities				
Accounts Receivables				
OTHER CURRENT ASSETS				
Total Other Current Assets				

SCHEDULE 2: CROP AND FEED INVENTORY				
DESCRIPTION	UNIT	(1) QUANTITY	(2) PRICE/UNIT	VALUE (1X2)
Total Crop and Feed Inventory				

SCHEDULE 3: LIVESTOCK (HELD FOR SALE) INVENTORY				
DESCRIPTION	UNIT	(1) QUANTITY	(2) PRICE/UNIT	VALUE (1X2)
Total Livestock Inventory				

SCHEDULE 4: SUPPLIES INVENTORY AND PREPAID EXPENSES				
DESCRIPTION	UNIT	(1) QUANTITY	(2) PRICE/UNIT	VALUE (1X2)
Total Supplies Inventory and Prepaid Expenses				

SCHEDULE 5: CASH INVESTED IN GROWING CROPS

CROP	(1) ACRES	(2) \$/ACRE	VALUE (1X2)
Total Cash Invested in Growing Crops			

SCHEDULE 6: MISCELLANEOUS NONCURRENT ASSETS

DESCRIPTION	VALUE
Capital Lease	
Cooperative Stock	
Investment in Other Entities	
OTHER NONCURRENT ASSETS	
Total Other Noncurrent Assets	

SCHEDULE 7: PURCHASED AND RAISED BREEDING ANIMALS

DESCRIPTION	(1) Number	(2) Cost Basis	(3) Accu. Depr.	Adj. Cost (2-3)	(4) Mkt/Head	VALUE (1X4)
PURCHASED BREEDING STOCK						
Total Purchased						
RAISED BREEDING STOCK						
Total Raised						

SCHEDULE 8: MACHINERY AND EQUIPMENT

DESCRIPTION	(1) Cost Basis	(2) Acc. Depr.	Adj. Cost (1-2)	Market Value
Total Machinery and Equipment				

SCHEDULE 9: LAND AND IMPROVEMENTS

DESCRIPTION	(1) Acres	(2) Cost Basis	(3) Acc. Depr	Adj. Cost (2-3)	(4) Mkd/ Acre	Total Mkd. (1x4)
LAND						
Total Land						
IMPROVEMENTS						
Total Improvements						

SCHEDULE 10: CURRENT LIABILITIES

ACCRUED EXPENSES	VALUE
Wages	
Interest	
Property Taxes	
Rent	
Other	
Total Accrued Expenses	
ACCOUNTS PAYABLE	
Total Accounts Payable	
Income Taxes and Social Security	
Notes Due Within 1 year	
Total Notes Due Within One Year	

SCHEDULE 11: NONCURRENT LIABILITIES

Creditor & Purpose	No. of Payments Remaining	No. of Payments Per Year	Interest Rate	Periodic Payment Amount	(1) Prin. Due 12 Months	(2) Non Current Principal	Total Principal (1+2)
NON REAL ESTATE DEBT							
Total Non Real Estate Debt							
REAL ESTATE DEBT							
Total Real Estate Debt							

SCHEDULE 12: DEFERRED CURRENT TAX LIABILITY

CURRENT ASSETS	(1) Mkt. Value	(2) Cost Basis	Difference (1-2)
Marketable Securities (1) *			
Accounts Receivables (1)			
Crop and Feed Inventory (2)			
Livestock Inventory (3)			
Supplies and Prepaid Expenses (4)			
Cash Investment in Growing Crops (5)			
(a) Total Difference: Tax Basis of Current Assets			
CURRENT LIABILITIES	VALUE		
Accrued Expenses (10)			
Accounts Payable (10)			
(b) Total Liabilities			
(c) Deferred Taxable Income Related to Current Assets/Liabilities (a-b)			
(d) Estimated Federal & State Income & Soc. Security Tax Rate			
Total Deferred Tax Expense Related to Current Assets/Liabilities (cxd)			

SCHEDULE 13: CONTRIBUTED CAPITAL, DEFERRED TAX LIABILITY, AND VALUATION EQUITY

Contributed Capital						
(e) Estimated Federal & State Income Tax Rate						
NON-CURRENT ASSETS	(1) Mkt. Value	(2) Cost Basis	(3) Difference (1-2)	(4) Deferred Tax (3xe)	(5) Net Mkt Value (1-4)	Valuation Equity (5-2)
Purchased Breeding Stock (7)						
(f) Raised Breeding Stock (7)						
Machinery and Equipment (8)						
Land (9)						
Improvements (9)						
(g) Total						
Total Valuation Equity, Less Raised Breeding Stock (g-f)						

* The numbers after the asset and liability items are the schedule number where the data are obtained.

BALANCE SHEET SCHEDULES

NAME: _____

BALANCE SHEET DATE: _____

SCHEDULE 1: MISCELLANEOUS CURRENT ASSETS				
DESCRIPTION				VALUE
Cash/Checking				
Savings Accounts				
Marketable Securities				
Accounts Receivables				
OTHER CURRENT ASSETS				
Total Other Current Assets				

SCHEDULE 2: CROP AND FEED INVENTORY				
DESCRIPTION	UNIT	(1) QUANTITY	(2) PRICE/UNIT	VALUE (1X2)
Total Crop and Feed Inventory				

SCHEDULE 3: LIVESTOCK (HELD FOR SALE) INVENTORY				
DESCRIPTION	UNIT	(1) QUANTITY	(2) PRICE/UNIT	VALUE (1X2)
Total Livestock Inventory				

SCHEDULE 4: SUPPLIES INVENTORY AND PREPAID EXPENSES				
DESCRIPTION	UNIT	(1) QUANTITY	(2) PRICE/UNIT	VALUE (1X2)
Total Supplies Inventory and Prepaid Expenses				

SCHEDULE 5: CASH INVESTED IN GROWING CROPS

CROP	(1) ACRES	(2) \$/ACRE	VALUE (1X2)
Total Cash Invested in Growing Crops			

SCHEDULE 6: MISCELLANEOUS NONCURRENT ASSETS

DESCRIPTION	VALUE
Capital Lease	
Cooperative Stock	
Investment in Other Entities	
OTHER NONCURRENT ASSETS	
Total Other Noncurrent Assets	

SCHEDULE 7: PURCHASED AND RAISED BREEDING ANIMALS

DESCRIPTION	(1) Number	(2) Cost Basis	(3) Accu. Depr.	Adj. Cost (2-3)	(4) Mkt/Head	VALUE (1X4)
PURCHASED BREEDING STOCK						
Total Purchased						
RAISED BREEDING STOCK						
Total Raised						

SCHEDULE 8: MACHINERY AND EQUIPMENT

DESCRIPTION	(1) Cost Basis	(2) Acc. Depr.	Adj. Cost (1-2)	Market Value
Total Machinery and Equipment				

SCHEDULE 9: LAND AND IMPROVEMENTS

DESCRIPTION	(1) Acres	(2) Cost Basis	(3) Acc. Depr	Adj. Cost (2-3)	(4) Mkt/ Acre	Total Mkt. (1x4)
LAND						
Total Land						
IMPROVEMENTS						
Total Improvements						

SCHEDULE 10: CURRENT LIABILITIES

ACCRUED EXPENSES	VALUE
Wages	
Interest	
Property Taxes	
Rent	
Other	
Total Accrued Expenses	
ACCOUNTS PAYABLE	
Total Accounts Payable	
Income Taxes and Social Security	
Notes Due Within 1 year	
Total Notes Due Within One Year	

SCHEDULE 11: NONCURRENT LIABILITIES

Creditor & Purpose	No. of Payments Remaining	No. of Payments Per Year	Interest Rate	Periodic Payment Amount	(1) Prin. Due 12 Months	(2) Non Current Principal	Total Principal (1 + 2)
NON REAL ESTATE DEBT							
Total Non Real Estate Debt							
REAL ESTATE DEBT							
Total Real Estate Debt							

SCHEDULE 12: DEFERRED CURRENT TAX LIABILITY

CURRENT ASSETS	(1) Mkt. Value	(2) Cost Basis	Difference (1-2)
Marketable Securities (1) *			
Accounts Receivables (1)			
Crop and Feed Inventory (2)			
Livestock Inventory (3)			
Supplies and Prepaid Expenses (4)			
Cash Investment in Growing Crops (5)			
(a) Total Difference: Tax Basis of Current Assets			
CURRENT LIABILITIES	VALUE		
Accrued Expenses (10)			
Accounts Payable (10)			
(b) Total Liabilities			
(c) Deferred Taxable Income Related to Current Assets/Liabilities (a-b)			
(d) Estimated Federal & State Income & Soc. Security Tax Rate			
Total Deferred Tax Expense Related to Current Assets/Liabilities (cxd)			

SCHEDULE 13: CONTRIBUTED CAPITAL, DEFERRED TAX LIABILITY, AND VALUATION EQUITY

Contributed Capital						
(e) Estimated Federal & State Income Tax Rate						
NON-CURRENT ASSETS	(1) Mkt. Value	(2) Cost Basis	(3) Difference (1-2)	(4) Deferred Tax (3xe)	(5) Net Mkt Value (1-4)	Valuation Equity (5-2)
Purchased Breeding Stock (7)						
(f) Raised Breeding Stock (7)						
Machinery and Equipment (8)						
Land (9)						
Improvements (9)						
(g) Total						
Total Valuation Equity, Less Raised Breeding Stock (g-f)						

* The numbers after the asset and liability items are the schedule number where the data are obtained.

OPERATING SCHEDULES

NAME: _____

OPERATING YEAR: _____

SCHEDULE 14: SALE OF CROPS				
DESCRIPTION	UNIT	(1) QUANTITY	(2) PRICE/UNIT	VALUE (1X2)
Total Sale of Crop				
SCHEDULE 15: SALE OF LIVESTOCK AND PRODUCTS				
DESCRIPTION	UNIT	(1) QUANTITY	(2) PRICE/UNIT	VALUE (1X2)
Market Livestock				
Livestock Products				
Raised Breeding Animals				
Total Sale of Livestock & Products				
SCHEDULE 16: OTHER INCOME FROM OPERATIONS				
DESCRIPTION	VALUE			
Cooperative Distributions				
Agricultural Program Payments				
Custom Hire				
Property Tax Refunds				
Other Refunds				
Other				
Total Other Income from Operation				
SCHEDULE 17: EXPENSES FROM OPERATION				
DESCRIPTION	VALUE			
Cost of Livestock for Resale				
Interest				
Depreciation - Machinery & Equipment				
- Buildings and Improvements				
- Breeding Livestock				
Family Labor Draw or Salary				
Income and Social Security Taxes				
Other Operating Expenses				

SCHEDULE 18: OTHER CASH INVESTING AND FINANCING ITEMS	
	VALUE
SALE OF CAPITAL ITEMS	
Breeding Livestock	
Machinery and Equipment	
Land	
Land Improvements	
PURCHASE OF CAPITAL ITEMS	
Breeding Livestock	
Machinery and Equipment	
Land	
Land Improvements	
MONEY BORROWED	
Notes Due Within One Year	
Operating Loans	
Non-Real Estate Term Loans	
Real Estate Term Loans	
PRINCIPLE PAYMENTS	
Notes Due Within One Year	
Operating Loans	
Scheduled Payments - NonReal Estate Debt	
Unscheduled Payments - NonReal Estate Debt	
Scheduled Payments - Real Estate Debt	
Unscheduled Payments - Real Estate Debt	
EQUITY CAPITAL	
Contributions from Owners	
Distributions to Owners	

FINANCIAL STATEMENTS

NAME: _____

Fiscal Year: _____

STATEMENT 1: BALANCE SHEET					
ASSETS	Beginning Date	Ending Date	LIABILITIES	Beginning Date	Ending Date
CURRENT			CURRENT		
Cash/Checking Accounts (1) *			Accrued Expenses (10)		
Savings Accounts (1)			Accounts Payable (10)		
Marketable Securities (1)			Income Tax & Social Security (10)		
Accounts Receivables (1)			Notes Due Within One year (10)		
Crop & Feed Inventory (2)			NonReal Estate Principal Due (11)		
Livestock Inventory (3)			Real Estate Principal Due (11)		
Supplies Inventory & Prepaid Expenses (4)			Deferred Taxes (Current Items) (12)		
Cash Invested in Growing Crops (5)					
Other Current Assets (1)					
Total current Assets			Total Current Liabilities		
NONCURRENT			NONCURRENT		
Purchased Breeding Animals (13)			NonReal Estate Loans (11)		
Raised Breeding Animals (13)			Real Estate Loans (11)		
Machinery & Equipment (13)					
Capital Leases (6)			Total NonCurrent Liabilities		
Cooperative Stock (6)					
Investments in Other Entities (6)			(b) Total Liabilities		
Improvements (13)			(c) Contributed Capital (13)		
Land (13)			(d) Valuation Equity (13)		
Other Noncurrent Assets (6)			Retained Earnings (e-c-d)		
Total Noncurrent Assets			(e) OWNER EQUITY (a-b)		
(a) Total Assets			Total Liabilities and Equity (b+e)		

* The numbers after the asset and liability item are the schedule numbers where the data are obtained.

STATEMENT 2: STATEMENT OF CASH FLOWS	
	VALUE
Sale of Crops (14) *	
Sale of Livestock and Products (15)	
Other Income from Operations (16)	
Total Sales	
Cost of Livestock for Resale (17)	
Net Sales	
Interest (17)	
Family Labor Draw (17)	
Income and Social Security Taxes (17)	
Other Operating Expenses (17)	
NET CASH PROVIDED BY OPERATING ACTIVITIES	
Sale of Capital Items (18)	
Purchase of Capital Items (18)	
NET CASH PROVIDED BY INVESTING ACTIVITIES	
Money Borrowed (18)	
Principal Payments (18)	
NET CASH PROVIDED BY FINANCING ACTIVITIES	
Capital Contributions (18)	
Capital Distributions (18)	
NET CASH PROVIDED BY CAPITAL ACTIVITIES	
Net Increase (Decrease) in Cash	
Cash at Beginning of Year	
Cash at End of Year	

* The numbers after the cash flow items are the schedule number where the data are obtained.

STATEMENT 3: INCOME STATEMENT	
REVENUE	VALUE
Crop Cash Sales (14) *	
+/- Change in Crop and Feed Inventory (Balance Sheet: Ending-Beginning Value)	
+/- Change in Cash Invested in Growing Crops (Balance Sheet: Ending-Beginning Value)	
Gross Revenues from Crops	
Market Livestock Sales (15)	
+/- Change in Market Livestock Inventory (Balance Sheet: Ending-Beginning Value)	
Gross Revenues from Market Livestock	
Sale of Raised Breeding Animals (15)	
+/- Change in Raised Breeding Stock Inventory (Balance Sheet: Ending-Beginning Value)	
Gross Revenue from Raised Breeding Stock	
Livestock Products (15)	
Other Income (16)	
+/- Change in Accounts Receivable (Balance Sheet: Ending-Beginning Value)	
GROSS REVENUE	
Less Cost of Livestock for Resale (17)	
VALUE OF FARM PRODUCTION	
EXPENSES	
Depreciation (17)	
Interest (17)	
Family Labor Draw or Salary (17)	
Other Cash Operating Expenses (17)	
+/- Change in Supplies and Prepaid Expenses (Balance Sheet: Beginning-Ending Value)	
+/- Change in Accrued Expenses (Balance Sheet: Ending-Beginning Value)	
+/- Change in Other Accounts Payable (Balance Sheet: Ending-Beginning Value)	
TOTAL EXPENSES	
NET FARM INCOME from Operations	
Gains/Loss on Sale of Farm Capital Assets	
NET EARNINGS before Taxes	
Income and Social Security Taxes (17)	
+/- Change in Income and SS Payable (Balance Sheet: Ending-Beginning Value)	
+/- Change in Current Deferred Taxes (Balance Sheet: Ending-Beginning Value)	
Income Tax Expense	
NET EARNINGS	

* The number after the cash flow items are the schedule number where the data are obtained.

STATEMENT 4: RECONCILIATION OF OWNER EQUITY			
			VALUE
Owner Equity, Beginning of Period (Balance Sheet)			
Net Earnings (Income Statement)			
Change in Contributed Capital (Balance Sheet: Ending-Beginning Value)			
Change in Valuation Equity (Balance Sheet: Ending-Beginning Value)			
OWNER EQUITY, END OF PERIOD: (Balance Sheet)			
FINANCIAL MEASURES AND RATIOS			
LIQUIDITY	Beginning Date	Ending Date	GOAL
Current Ratio			
Working Capital			
SOLVENCY			
Debt/Asset Ratio (Percent)			
Equity/Asset Ratio (Percent)			
Leverage Ratio			
PROFITABILITY			
Rate of Return on Assets (ROA)			
Rate of Return on Equity (ROE)			
Net Farm Income (NFI)			
Net Earnings			
REPAYMENT CAPACITY			
Debt Coverage Ratio			
Capital/Debt Repayment Margin			
FINANCIAL EFFICIENCY			
Asset Turnover Ratio (Percent)			
Operating Profit Margin Ratio (Percent)			
Operating Expense Ratio (Percent)			
Depreciation Expense Ratio (Percent)			
Interest Expense Ratio (Percent)			
Net Farm Income Ratio (Percent)			