



FINANCIAL RISK

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This is the fourth article in a series of six that provide an overview of agricultural risk management.

Financial Risk covers those risks that directly threaten the financial health of the farm business. Financial risk has three basic components: 1) the cost and availability of debt capital; 2) the ability to meet cash flow needs in a timely manner; and, 3) the ability to maintain and grow equity.

The capital structure of any business includes both debt (borrowed) and equity (owned) capital. Both debt and equity face risks. Debt capital can be more risky because of the obligations to others that are part of the financing agreement, or loan document. Cash flows are part of financial risk and are especially important because of the variety of ongoing farm obligations, such as cash input costs, cash lease payments, tax payments, debt repayment, and family living expenses.

Record Keeping

Effective management depends on accurate measurement. In fact, if it can't be measured, it can't be effectively managed.

A set of well-maintained financial records is an absolute necessity to maintaining financial control of a farm or ranch. Accurate information is critical in evaluating past performance and in planning for future accomplishments. Financial risk management is not achieved directly by maintaining comprehensive records. However, records do provide much of the information needed to understand critical financial risks. Even small farms need a basic level of record keeping.

A common misconception by some is that farm records are kept only to report taxes. But a successful farm business needs records for many other purposes too. Some of the most common uses for good records are: 1) measuring operating and financial performance, 2) supporting loan applications, 3) arranging for insurance coverage, 4) estate planning and valuation, 5) analyzing investments in depreciable assets, 6) measuring the profitability of individual enterprises, 7) monitoring

production inventories, and, 8) developing sound marketing plans.

Farm record systems vary in the amount of information collected, the method of recording data and the structure of final reports. Every farm manager must determine how much information is needed for management purposes, what accounting methodology to use, and what system will provide the desired information.

Record keeping starts with financial and physical inventories and includes those records needed to successfully manage the farm. This includes production records and enterprise budgets, financial records (income statement, balance sheet, cash flow budget, family living budget), ownership/personal records including asset inventories, ownership arrangements, and estate plans and documents.

Financial Statements

Essential financial statements include the balance sheet and statement of owner's equity, income statement, and projected and actual cash flows. These records provide a financial history of the farm and the data needed to adequately calculate financial performance measures.

Balance Sheet

The balance sheet is also known as a net worth statement and is a financial snapshot of the farm business on a specific date. It shows all assets, liabilities and owner equity or net worth. The balance sheet usually segregates assets and liabilities into current, intermediate and long-term (or fixed) categories. Ideally, it should also reflect cost versus market valuations for assets, debts and equity. The balance sheet is critical for measuring liquidity and solvency.

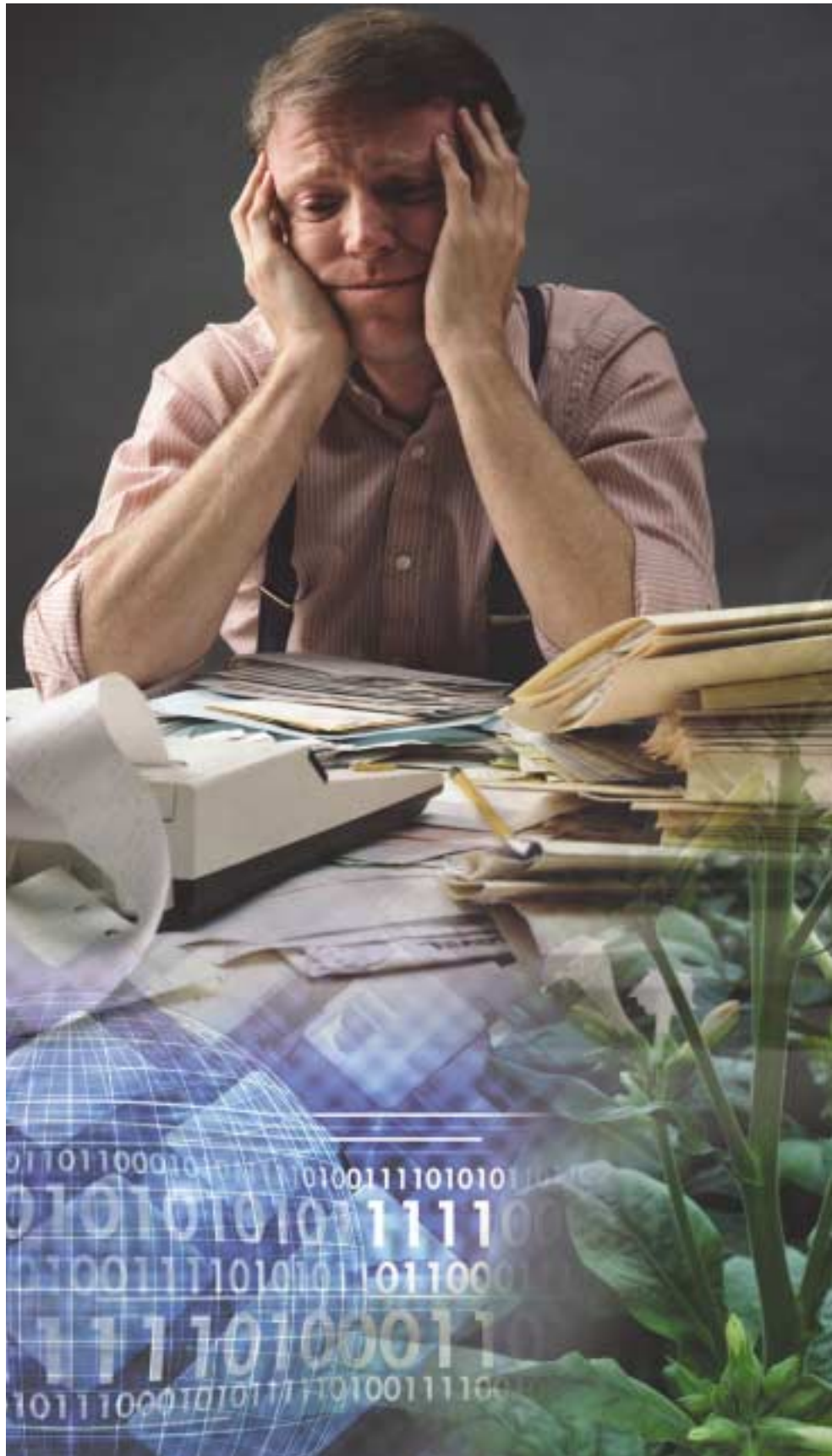
Income Statement

The income statement is also known as a profit and loss statement. This report shows the net income for the farm during the accounting period. It includes such elements as income generated from farm production, operating and overhead expenses, depreciation expense, gains or losses on disposal of capital assets, and non-farm income and expense. It can be prepared on either a cash or accrual basis and enables the producer to identify various measures of profitability and financial efficiency.

In summary, the income statement is the document that correctly measures net farm income. It is essential to financial analysis, loan documentation, and filing tax returns. It shows how profitable the farm is.

Owners Equity

A key indicator of farm financial progress over time is the change in owner equity. Changes in owner equity can result from earnings, withdrawals, increases and decreases in the market



value of assets, or personal net worth changes.

The statement of owner equity is relatively new as a financial statement but the concept has been used for years. It formally links together beginning and ending balance sheets and the corresponding income statement. In doing this it reconciles the information they contain and shows the impact family living withdrawals have on the farm. It also helps to separate the effects of inflation on asset values from the effect of earnings.

Cash Flow Statement

Effective financial control of the farm business requires thorough knowledge of the sources and uses of cash in the business. Some farms that have both a strong balance sheet and income statement find it difficult to generate cash when it is needed to meet cash commitments.

The cash flow statement, also known as a “sources and uses of funds” or a “flow of funds” statement, summarizes all cash transactions affecting the business during a given period of time such as a month, quarter, or year. It provides a means of following movements of cash in the business. Neither an income tax return nor an income statement provides the same information as a cash flow statement.

A cash flow statement can be a statement of past performance or a budget for future plans. As a statement of past performance, a cash flow statement shows how and when cash was generated and used to pay for inputs and capital items, family living expenses and loan payments. As a budget of future plans, a cash flow statement is essential for evaluating your business’ borrowing needs and repayment capacity.

Cash flow analysis includes a more complete accounting of debt transactions by showing principal payments and proceeds of new loans. An income statement only shows interest payments.

A complete cash flow statement

includes non-farm or ranch business items such as income taxes and non-farm or ranch income. These items may be omitted from an income statement. Cash withdrawals for such things as stock dividends and family living expenses are usually included in a cash flow statement. An income statement does not include family living expenses or dividends.

Budgeting

A budget can be viewed as a schedule of expected returns and costs. A budget is an estimate and plan for what is going to happen. Seldom does anything turn out exactly as planned, or budgeted, but it is essential to anticipate and estimate what is expected to happen. Budgets are a must when seeking financing from lenders and are essential to managing any activity, especially farming.

Enterprise Budgets

An enterprise budget is a budget prepared for a single enterprise. An enterprise is defined as any portion of the farm business that can be separated from others by accounting procedures according to its receipts and expenses. Enterprise budgets project costs and returns over a production period including direct costs (seed, chemicals, fertilizer, crop insurance, fuel, repairs, hired labor, irrigation, etc.), indirect costs (marketing overhead, depreciation, investment and land taxes), returns to management and labor; and yield records including both quantity and quality. An enterprise budget is a projection of costs and returns based on projected yields and prices, whereas, an enterprise account is a historic summary based on actual yields and price.

Enterprise budgets form the basis for constructing whole farm, partial, and cash flow budgets. An enterprise budget includes all of the expected costs and returns associated with producing one enterprise in a particular manner. They

are usually constructed on a per unit basis (such as per acre) to facilitate comparisons among alternatives.

Partial Budgets

Partial budgets are used to estimate the change that will occur in profit or loss from some change in the farm by considering only those items of income and expense that change. They are easy to construct, and very helpful in decision-making.

Whole Farm Budgets

A whole farm (or complete) budget is a physical and financial plan of the entire farm or ranch business designed to help plan and organize every aspect of the business. It is the most appropriate tool to use when alternative courses of action will change the size and/or organization of your business, or when these changes will have a long-term impact on your business in terms of enterprises, finances, etc.

Whole farm budgeting is a tool to analyze major changes in your farm business. The process includes estimating total receipts, total costs and resultant net earnings for each alternative, so you can see which alternative has the best chance of achieving satisfactory levels of profitability, liquidity and solvency.

Family Living Budgets

A family budget is just exactly what the name says, a budget for family living. It includes all sources (farm and non-farm) and estimated amounts of income that is used by the family during the year. Meeting the needs of family living are critical to survival, and when the family budget is in order it makes it easier to operate the farm. For this reason family budgeting is the foundation of a sound financial management plan and essential to success of the farm.

When used in conjunction with historical records of actual spending, a family budget pinpoints and identifies unnecessary spending and areas where actual costs may be higher or lower than previously thought.



Financial Performance Measures

The main issues of managing financial risk center around the liquidity, solvency, and profitability of a farm business. Liquidity is the ability to meet cash obligations in a timely manner. Solvency is the ability to convert all assets to cash to retire the debt and still have some left over, thus solvency is a measure of the amount of debt relative to equity in the business. Profitability is a measure of the extent to which the resources on the farm are put to productive use and are able to generate a positive return (profit).

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. Financial ratios and values that measure liquidity are calculated from balance sheet data.

Solvency

Solvency measures the amount of debt and other expense obligations used in the farm business relative to the amount of owner equity invested in the business. Solvency ratios provide an indication of the business' ability to repay all financial obligations if all assets were sold, as well as an indication of the ability to continue operations as a viable farm business after a financial adversity. Financial ratios that measure solvency are calculated from balance sheet data.

Profitability

Profitability measures the extent to which a farm business generates a profit

from the use of land, labor, management, and capital. Financial ratios and values that measure profitability are calculated from balance sheet and income statement data.

References

There are numerous sources of outstanding materials on all aspects of farm financial management and financial risk. Contact your local Cooperative Extension office for assistance and direction.

The Risk Management Education web site maintained by the University of Minnesota is an excellent starting point. This vast and current library of information can be accessed at: www.agrisk.umn.edu. **TODAY**