Risk and Resilience in Agriculture

Preparing a Balance Sheet

By: Norm Dalsted and Rod Sharp
Colorado State University

Introduction

The critical need for enhanced financial management skills and techniques in production agriculture became apparent in the 1980s. The decade of the 1980s, particularly the period 1981 through 1987, saw the financial position and conditions of many operations deteriorate. Many producers were faced with insufficient cash flow, declining asset values, rationing of capital by agricultural lenders, voluntary or forced liquidation, foreclosure (total or partial), and bankruptcy. The stress of the financial situation was felt throughout the agricultural sector - including lenders, retail trade and the service sector. The financial stress was documented by loan delinquencies and losses, inadequate securities for loans, reduced business volume, and other income flows within the rural/regional economies.

The financial distress was a consequence of a number of factors which were in place during the 1970s, but reversed direction in the early 1980s. These factors include but are not limited to:

1. Inflation (increasing land values primarily).
2. Favorable foreign exchange rates.
3. Strong export market (strong international market).
4. Low "real" interest rates (negative real rate in 1974 and 1975).
5. Increased commodity supplies (capacity was expanded by 20 percent in the 1970s).

The financial distress among farmers/ranchers and agricultural lenders was rooted in the inflationary decade of the 1970s, and subsequent adjustments from that period to sharply different economic conditions in the 1980s. Throughout the 1970s, farmers and ranchers faced rapidly expanding exports, accelerating inflation, and low to negative real interest rates (the nominal interest rate minus the inflation rate). Farmers and ranchers responded by borrowing heavily to invest in new equipment, adopt new production technologies, and purchase increasingly expensive land. Farm debt rose an average of more than 10 percent a year. Yet land values rose even faster, providing the economic incentive for producers and lenders to expand and roll over debt. Debt/asset ratios of farms declined over the 1970s.

By the early 1980s, the factors that had given rise to the expansion had reversed direction. Worldwide recession weakened international markets; the value of the dollar rose rapidly against major foreign currencies, further dampening export demand; and inflation was slowed by stringent control of monetary growth. Real interest rates, which had been low or negative throughout the 1970s, jumped to unprecedented levels of 8 to 10 percent. Agricultural commodities in foreign and domestic markets were too plentiful to sustain the prices that had prevailed during the 1970s, causing commodity prices and producer incomes to drop significantly. Land values, which depend on both current farm income and prospects for future income growth, also begin to decline. The debt levels that some producers had assumed over the 1970s were no longer sustainable. Agricultural operations whose solvency depended on continuously rising land values or who pursued an aggressive expansion strategy were pushed toward insolvency. Moreover, even those producers who pursued more cautious financial strategies in the 1970s, but suffered from the 1980 or 1983 droughts or other natural disasters, faced financial stress for a different reason.

The need for enhanced financial management skills and techniques became critical to many agricultural producers. Many efforts were undertaken in the public and private sector in an attempt to fulfill this need. This need, coupled with the growth and development of the micro computer, resulted in many products that were helpful but often incompatible. In the following section, discussion related to the standardization of financial reporting and analysis and its evolvement through efforts of the Farm Financial Standards Task Force (FFSTF) is presented.

History of The Farm Financial Standards Task Force

The following paragraphs, selected from the publication Recommendations of the Farm Financial Standards Task Force, clearly outline the need for standardization of financial reporting in agriculture[1]. Since this chapter adheres to the recommendations of this document, it is important that the background be established.

"During the decade of the 1980s, forces were set in motion that substantially changed the methods of analyzing financial strengths and providing credit to production agriculture. Through most of that decade the farm financial industry was in turmoil caused by an unforeseen run-up in interest rates, record levels of farm debt, large fluctuations in farm income, a rapid decline in the value of farm assets, and insufficient or under-utilized methods for analyzing the true profitability of various farm enterprises.

This environment created an increased interest in farm financial education and sophisticated financial analysis techniques. The demand brought about a rapid expansion in the number of products and services available for this analysis. Because each new system utilized its own specific method for analyzing farm operations, it was often difficult for agricultural producers, lenders, or farm financial experts to conduct comparative analysis between farming operations.

The lack of standardization in farm financial analysis caused problems in understanding and using data for decisions, and was often cited as a substantial barrier to the

[1] Financial Guidelines for Agricultural Producers II, Recommendations of the Farm Financial Standards Task Force, Revised December, 1997.

accessibility of funds from capital markets. The magnitude of the problem was underscored when Congress passed the 1987 Agricultural Credit Act. During the debate on this legislation, experts testified that the lack of uniformity in analyzing farm operations would prohibit the establishment of privatized secondary markets for agriculture. Thus, when the legislation was enacted, it contained provisions for the government to sponsor a secondary market for agricultural real estate loans.

At the same time that Congress was working on the 1987 Agricultural Credit Act, the National Commission on Agricultural Finance, appointed by President Reagan, was examining the farm financial industry. This Commission cited a need for standardization of agricultural credit analysis and farm financial statements. Their report claimed that, without standardization nationwide, the agricultural industry would have difficulty learning how to analyze the financial strength of their operations, and agricultural producers would probably pay a premium for borrowed funds as a result.

Thus, the overwhelming evidence from all sectors seemed to indicate that agricultural producers, lenders, financial analysts, and agricultural economists could make better financial management decisions by uniformly defining the data, criteria, and measures that are most useful in addressing specific farm financial questions. In response to this issue, the Executive Committee of the Agricultural Bankers Division of the American Bankers Association (ABA) formed the Farm Financial Standards Task Force (FFSTF)."

The following discussion provides an overview of the recommendations of the FFSTF. The minimum set of financial statements are discussed as well as the recommended financial measures of performance analysis. Each financial statement is presented and discussed briefly. It is recommended that the reader acquire a copy of the FFSTF recommendations to gain further detail.

The minimum set of financial statements recommended by the FFSTF include:

- Balance Sheet
- Income Statement
- Statement of Cash Flows
- Statement of Owner Equity

Further, it is extremely important that the statements be prepared on a consistent basis, i.e. cover identical time periods. The task force did not develop specific formats for these financial statements; only recommended general guidelines to ensure uniformity of reporting. As such, financial analyses (ratio and comparative analyses) is more uniform. The following is a brief description of each of the financial statements and the type of management decisions for which each of the statements can be used.

Balance Sheet

In this section, the foundation of the balance sheet will be laid. The balance sheet can be derived from the fundamental accounting equation:

Assets = Owner's Liabilities + Owner Equity

OR

Owner Equity = Assets - Liabilities

Traditionally, the balance sheet is arranged such that assets are listed on the left side and liabilities and owner's equity on the right side. The balance sheet has historically been the primary (and often only) financial statement used for agricultural lending. Until the events of 1980s demonstrated the necessity of more financial information for proper financial management, the balance sheet was relied

Assets		Liabilities	
Current:	________	Current:	________
Intermediate:	________	Intermediate:	________
Long term:	________	Long term:	________
		Total Liabilities:	________
		Owner's Equity	________
Total Assets:	________	**Total Liabilities and Owner's Equity:**	________

upon as the means to evaluate potential borrowers.

The balance sheet must balance, hence the name balance sheet--total assets equal to total liabilities and net worth (owner equity).

What items fall under each of these categories? The following definitions aid in classifying both assets and liabilities.

Current assets: Items that are held for sale, cash on hand, savings, inventory of products that could be sold, and financial instruments that are readily convertible to cash (e.g., shares in IBM).

Current liabilities: Items that are due and must be paid within the next year. This would include outstanding feed, fertilizer, wages, fuel bills, etc. Also included are accrued interest and principal payments on operating notes, machinery, livestock loans, real estate mortgage payments and lease payments due during the next year.

Intermediate assets: Tend to be the working assets in the business: machinery, equipment and breeding stock are valued in this category. Others include stock in Farm Credit Services or other similar entities that have value but are not readily marketable. Often life insurance policies with cash value are placed in this category. Recreational and personal assets may or may not be listed.

Intermediate Liabilities: Account for the loans for machinery, equipment, or livestock and other financial obligations that have a term of 10 years or less. Thus, any liabilities that have been amortized for more than one year but no more than ten years would be listed in this section.

Long-term Assets: Real estate (including buildings and improvements) are accounted for. Other assets listed could include a residential home or vacation home. In areas where irrigation water rights are transferable as in many western states, water rights may appear as a separate asset if a value can be determined separately from the land.

Long-term Liabilities: Real estate loans are primary items in this category. Others include land purchase contracts or personal notes that have been termed over 10 years. Typically any loan or note with an amortization period greater than 10 years would appear in this category.

In the future, if the recommendations of the Farm Financial Statements Task Force (FFSTF) are accepted by the agricultural lending industry and others, there will be only two categories of assets and liabilities -- current and non-current categories. The current category will remain as defined but the non-current category will combine the intermediate and long-term categories into one.

There are arguments supporting both approaches, but if agricultural finance is to evolve to a level observed in other sectors of the economy, the recommendations of the FFSTF should be followed. Arguments that agriculture (production sector) is unique and working assets need to be separated from long-term assets is valid. However, firms in other sectors face the same issue. Separating working assets for the purpose of determining debt structure and debt balance is a reasonable request. However, utilizing the non-current category (assuming sufficient attention is directed at listing such assets) will not deter such analyses from being accomplished.

Balance sheets are normally prepared for separate entities even in a sole proprietorship. GAAP guidelines in traditional accounting support that the business be reported separately from its owner. The exception is agriculture where producers and lenders prefer a consolidated or combined statement. A combined statement includes both personal and business assets and liabilities.