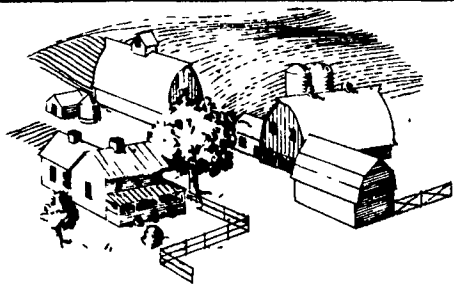


# FARM



# MANAGEMENT

## UNDERSTANDING SOLVENCY AND LIQUIDITY MEASURES

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Business Management  
Agent

**Editor's note:** This second of an eight-article series written by the five Southeastern/Central Penn State Extension Farm Management Agents, covering various farm profitability and efficiency measurement tools and ratios.

In these uncertain economic times, lenders have become increasingly cautious and may require more financial information than you have provided in the past. Their purpose is to carefully evaluate your financial situation and judge your ability to meet loan obligations. Solvency and liquidity measures are two of the most commonly used tools to evaluate the financial health of a business.

Much of the information necessary to compute these measures is

found on the balance sheet. This provides a "snapshot" of the financial situation of the business at a specific point in time. It should be developed at the end of each financial year by every farm manager. Comparison of successive balance sheets will then provide a general indication of business progress.

### Solvency Net Worth

Solvency calculations begin with a comparison of total assets and liabilities. The difference is net worth. A positive net worth (assets greater than liabilities) indicates that the business is solvent while a negative net worth (liabilities greater than assets) means that the business is insolvent.

The net worth of a business reflects owner equity and is a very general indicator of the risk involved in making a loan to that business. A large net worth relative to total assets means that a

loan would be well secured and the risk of default small. A small net worth could present an obstacle to securing credit because the risk of loss to the lender is greater.

There are numerous ratios used in balance sheet analysis to evaluate solvency and liquidity. However, these ratios should only be used as tools for an initial evaluation and not to answer specific questions about problems within the business. They are only general indicators pointing to a need for further investigation.

### Net Capital Ratio

The net capital ratio is a common measure of solvency and is calculated by dividing total assets by total liabilities. A solvent business is one with a ratio of 1:1 or higher (one dollar of assets for each dollar of liabilities). A financially healthy business should have a net capital ratio of at least 2.5:1, indicating that owner equity is at least 60 percent of all assets used in the business.

### Debt-Equity Ratio

The debt-equity ratio is a measure of solvency that reflects the relationship between borrowed and owned (equity) capital and is commonly used by lenders. It is calculated by dividing total debt by owner equity. A ratio of less than 1:1 indicates that the owner of the business owns a larger share of that business than the lender. One of the best uses for this ratio is a comparison from one year to another to

asses the changes in debt over time. As the ratio decreases, owner equity increases. A financially healthy business should have a debt-equity ratio of 2:3 (.67) or less, but this will vary with the quality of management, the source of income and the level of profits.

### Liquidity

A financially healthy business will have a greater amount of current assets than current liabilities ("current" indicates an impact on the business within one year). Generally current assets should at least equal 1.5 times total current liabilities.

This excess is needed to serve as a financial cushion in case of a rapid drop in the price of current assets (such as a crop). A rapid decrease in price of current assets could destroy the liquidity of a business if there are barely enough current assets to cover current liabilities.

The excess of current assets also indicates good financial health because the excess is the source of working capital (the funds necessary for covering day to day expenses).

A shortage of working capital may mean borrowing additional funds or liquidating longer-term assets (i.e. machinery or land) to cover current operating expenses. Neither of these options are advisable because borrowing additional funds may take too long, and selling other assets may reduce future production capacity or the ability

to borrow.

### Current Debt Ratio

The current ratio measures current liabilities relative to total liabilities as follows:

$$\text{Current Debt Ratio} = \frac{\text{Current liabilities}}{\text{Total liabilities}}$$

The current debt ratio indicates the part of total debt that must be repaid within a year. A 1:5 ratio (or .2) indicates that 20 percent of total debt must be repaid within one year. The higher the ratio, the greater the drain on cash reserves and the greater the risk of being unable to meet current financial obligations. A high ratio could indicate a need to refinance to convert part of the current debt into a longer-term obligation. However, be careful not to dig yourself into a deeper hole by converting current debt into long-term liabilities without a realistic plan for repayment.

The current debt ratio must be interpreted with care and probably should be used only to put other ratios in perspective because it does not include net worth. For example, an individual with \$500,000 net worth and \$5,000 of debt composed of \$4,000 of current liabilities and \$1,000 of longer term liabilities would have a current debt ratio of 4:5 (.8) but is not in immediate financial danger.

For more information about financial analysis, contact your county extension office for a copy of "Farm Business Analysis: Key to Pennsylvania Farm Profitability" (extension circular 375).

## Guernsey Breeders' Journal Hires Intern

REYNOLDSBURG, Ohio — Priscilla Harvey of Vancouver, Washington, recently joined the Guernsey Breeders' Journal staff as an intern.

Harvey assumed her full-time position in May. She will assist Journal staff with advertising and feature stories. She will also assist the Information Department with news releases and promotional efforts.

Harvey is to be a senior this fall at Washington State University in Pullman, Washington. She is to graduate in May of 1992 with a Bachelor of Science degree in Agricultural Communications.

At Washington State University, Harvey is a very active member of the WSU Dairy Club and served as president during her junior year. She is also an active member of Agriculture Communicators of Tomorrow (ACT) and currently serves as PR Chairman.

Harvey is a 2-year member of the Washington State University Dairy Judging Team and placed fourth overall in the Western Invitational Dairy Judging Contest in Richmond, Utah, this spring. She will be competing in the national intercollegiate contest this fall.

Harvey was a 10-year member of 4-H where she was involved in showing registered Guernseys, judging and giving demonstrations. She was a Guernsey Junior Member and won several Guernsey Youth awards. Harvey was also the 1985 Clark County Dairy Princess.

Harvey is the daughter of Mike and Betty Harvey.

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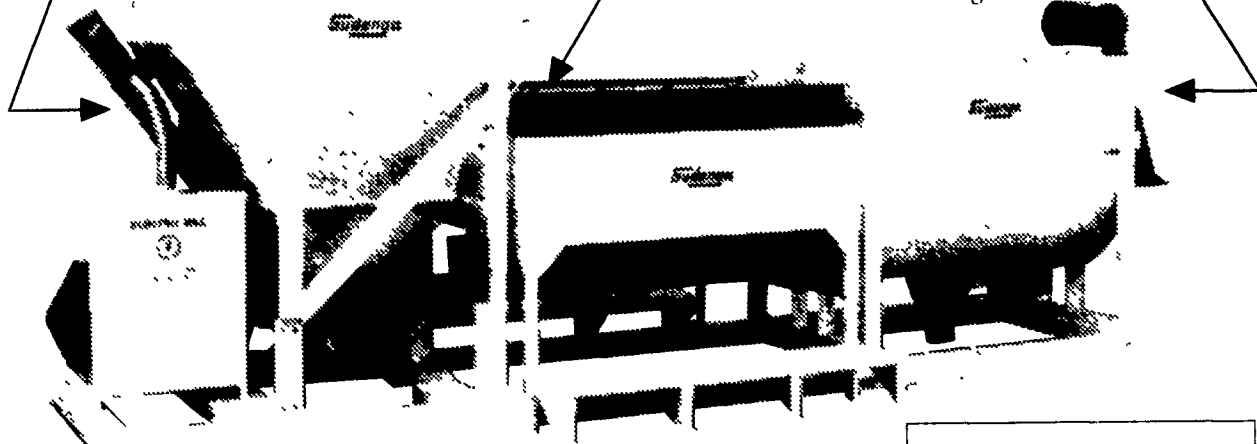
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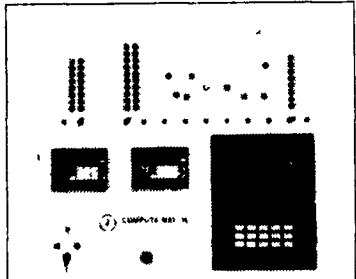


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