

Is Your Farm Business Accurately Measuring Profitability: A Checklist for Building Complete, Accurate and Consistent Financial Statements

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Introduction

Business managers across production agriculture rely on their financial statements to assist them in managing their farms. The statements communicate to them financial measures and ratios that can be used to assess the profitability and financial health of the business. Financial performance measures are only as accurate as the information reported on the underlying financial statements from which they are derived. Managers expect these statements to report complete, accurate, and consistent information.

Preparing agricultural financial statements is a process that requires decisions about what items to include, how and when to include them, and how to value them. These decisions can greatly affect the financial picture that emerges from an analysis of financial measures and ratios derived from a set of farm financial statements. Good decisions made during this process lead to more complete financial information and more accurate financial measures.

There is more inconsistency in farm financial statements than many farmers may realize. This doesn't mean necessarily that the financial statements were prepared incorrectly. In many cases the inconsistencies arise because of diversity in accounting practices. These practices reflect important underlying differences in the way businesses are organized and operate and in the information needs of information users. Nevertheless, the users of farm financial statements need to be aware of the potential for inconsistencies and what to look for in order to more accurately measure and assess profitability and financial condition.

This publication first provides a checklist that can be used to assess the completeness, accuracy and consistency of financial statement information when preparing farm financial statements or when interpreting financial performance measures based on the financial statements. The list of issues discussed in the second part is not intended to be a comprehensive list, but it does address many of the most common and problematic issues affecting financial analysis of farm business performance. The checklist is designed to work best in situations in which the valuation method is used to measure income. This method has been very widely used in agriculture. Appendix 1 describes this method and contrasts it with the transactions method, which is the predominant method used in general business accounting, which is becoming more important in agriculture as more farmers adopt computerized double entry accounting systems.

Because financial measures are interrelated, it is extremely important to be consistent in the use of financial statement information when computing financial statement measures. Appendix 2 discusses the four basic types of general purpose financial statements recommended for farm financial reporting and the nature of their interrelationships. Any reliable set of farm accounting records comprises a system of accounts. Thus, the financial statements that summarize accounting systems are systematically related to each other. Appendix 2 emphasizes that these four farm financial statements need to be consistent with each other.

The usefulness of accounting information is enhanced through increased uniformity in the methods used to report financial performance. Financial reporting guidelines and accounting standards provide the means to accomplish greater uniformity to the extent that individuals involved in the preparation and analysis of farm financial statements become familiar with those standards and apply them. Farmers can more effectively communicate financial accounting information by making sure their financial reports conform to such guidelines and standards. The checklist that follows relies heavily on the recommendations on farm financial reporting published in the Farm Financial Standards Council's *Guidelines for Agricultural Producers*. These *Guidelines* may be downloaded from the Council's Internet address at: www.ffsc.org. The need for attention to standards increases dramatically when either of the two following business analysis techniques are used to evaluate farm financial performance:

- **Benchmarking** is an extremely useful business analysis technique that involves comparing the performance of your farm to very successful farms that are similar to yours. Uniformity in the methods used to prepare financial statements and compute financial measures is absolutely critical when using benchmarking to assess farm performance. Otherwise the person comparing farm performances may unwittingly compare measures that aren't really comparable. Most databases on farm performance have been developed using a particular set of rules or standards, so it is important to familiarize yourself with the standards that were applied to the database that you want to compare to and to make conforming adjustments in your own financial statement information.
- **Trend analysis** is a second very important technique for assessing farm business performance that involves comparing the current year's performance for a particular farm to the same farm's performance in prior years. It is absolutely critical to be consistent from year to year in compiling financial statement information and computing financial measures when doing trend analysis. Again, accounting standards and reporting guidelines can be the key to achieving not only uniformity, but also consistency.

Checklist for Assessing the Completeness, Accuracy, and Consistency of Farm Financial Statements

This is a checklist of issues to consider when compiling the financial statements of a farm business for farm business analysis. Place a checkmark in the “Yes” column next to those issues described at left that you have adequately considered during the process of compiling financial statements. Place a checkmark in the “No” column relative to issues that you need to consider further.

Each issue is numbered. Each numbered issue in the checklist corresponds to a more thorough discussion of that issue which is located in the text section immediately after the checklist. After assessing your financial statement follow up by reading the discussion pertaining to each issue you either don’t understand or you checked the “No” column in the checklist. Then make any conforming adjustments to your financial statements.

	Yes	No
<u>Issue 1.</u> Are the financial statements on an accrual basis?	_____	_____
A. Are changes in the value of stored grains and livestock held for sale included?	_____	_____
B. Are changes in accounts receivable and payable included?	_____	_____
C. Have all unpaid bills at year-end been included?	_____	_____
D. Are all prepaid expenses, supplies and investments in growing crops included for the accounting period?	_____	_____
E. Is accrued interest included?	_____	_____
F. Are all other accrued expenses included?	_____	_____
G. Are all income and social security taxes payable attributable to the farm included?	_____	_____
H. Are the accrual adjustments the same on the income statement and the balance sheet?	_____	_____
<u>Issue 2.</u> Have you accurately and completely recorded transactions between the owner and the business?	_____	_____
<u>Issue 3.</u> Are personal assets and liabilities excluded from the farm balance sheet?	_____	_____
<u>Issue 4.</u> Is off-farm income or expense excluded from the income statement?	_____	_____

	Yes	No
Issue 5. Are the three sources of owner equity reported separately, i.e. contributed/paid-in capital, retained earnings, and valuation equity?	_____	_____
A. Are changes in the value of noncurrent assets included on the income statement?	_____	_____
B. Have you combined the statements of all the different business entities you may have that are operated as one farm business unit?	_____	_____
Issue 6. Has the farm paid you for your time and management?	_____	_____
Issue 7. Are income taxes included in the financial statements of the business?	_____	_____
Issue 8. Are deferred tax liabilities included in the income statement?	_____	_____
Issue 9. Are all assets on the balance sheet classified properly?	_____	_____
Issue 10. Have all principal amounts on term debts that are likely to be paid beyond next year been properly classified as term debts?	_____	_____
A. Has the interest that accrued between the most recent payment date and the ending balance sheet date been reported on the balance sheet?	_____	_____
B. Has the principal due within the next 12 months on all term loans been classified as a current liability?	_____	_____
C. Is interest that will accrue after the balance sheet date excluded?	_____	_____
Issue 11. Are current assets valued at net realizable values (versus cost)?	_____	_____
Issue 12. Are noncurrent assets valued at market values (versus cost)?	_____	_____
Issue 13. Are capital lease obligations included on the balance sheet?	_____	_____

Discussion of Financial Statement Issues

Financial records must be: 1) of high quality, 2) organized into detailed financial statements, and 3) be used in the management process (Bagnall and Aukes). However, a number of problems in appropriately organizing financial statements need to be addressed by farm managers in order to create a set of financial documents that accurately assesses the health of the business. Each of the numbered issues below refers to the brief discussion found in the previous checklist.

Issue 1. Accrual versus Cash Accounting

One of the more important management decisions a farm manager should make is the selection of a useful financial reporting system to prepare financial documents for analysis. Cash accounting systems are widely used in agriculture because the Internal Revenue Code allows most farmers and ranchers to calculate taxable income on the cash basis. A certain amount of flexibility is gained for income tax management purposes, because farm products can be held and sold later in order to delay income to the next accounting period. Or inputs can be prepaid to increase expenses for the current period. So cash accounting has benefits for use in managing taxes. But as a general management tool, cash accounting cannot accurately measure income or business performance, nor can accrual financial ratios be calculated using cash income and expense information.

Accrual accounting provides a more accurate assessment of profitability in a particular accounting period. Accrual accounting recognizes revenue in the time period in which it was earned (expenses incurred to produce revenues are matched to the period the corresponding revenues are recognized). Cash accounting simply recognizes revenues and expenses when cash actually changed hands (except for depreciation and products transferred in lieu of cash). Thus accrual accounting practices presents a much more accurate picture of the true performance of the business.

The point of using accrual accounting is to more accurately measure the revenue of a given period (revenue realization) and to match revenues and expenses in a given period. Measuring revenues and expenses on an accrual basis does not require keeping farm records on an accrual basis because adjustments can be made at the end of the year to report on the accrual basis. Recording transactions on the accrual basis rather than the cash basis would jeopardize the ability of the business to use the cash basis for income tax reporting to the IRS. The IRS has specifically said that if accrual accounting methods are used, then tax reporting cannot be made using the cash basis.

Making Accrual Adjustments

Accrual adjustments to cash income and expenses are a prerequisite for producing accurate measures of earnings performance. Farm businesses can, and in many cases should, continue to use cash accounting for everyday record keeping, but accrual adjustments should be made to accurately measure income. Research at the University of Illinois has shown conclusively that annual accrual net income on Midwest farms can be, and on average is, markedly different from cash net income. As a result, neither an income statement compiled using the cash basis of

accounting, nor the net income reported on a cash basis Schedule F in a farmer's individual income tax return, can be relied upon to produce an accurate measure of annual earnings. But, with accrual adjustments an accurate measurement of periodic income can be calculated.

Accrual recognition of income means that income is recognized in the year it is earned rather than when cash is received. Income is earned when the earning process is substantially complete. In farming, income is recognized at either the point of completed production or the point of sale. Income may be recognized when production is complete only if the production is available for immediate delivery. Accrual recognition of expenses involves matching expenses to the period in which they were used in the production of income, rather than when cash was expended. Product expenses, which are expenses traceable to products, are matched to the year that the income from the product is recognized. Period expenses, which are expenses that aren't traceable to products, are recognized in the period in which they are incurred.

Accrual adjustments are made for changes in current assets and liabilities reported on the farm business balance sheets. For that reason, the dates of the beginning and ending balance sheets must correspond to the first and last days of the year reflected in the cash income statement in order to produce accurate accrual adjustments.

The most common accrual adjustment to income involves adding an increase in the inventory value of crops and livestock held for sale to farm cash receipts (or to deduct a decrease in the value of inventories). A similar accrual adjustment would be made for the change in the value of farm accounts receivables. For example, if the USDA owes your farm more government farm payments at year-end than at the beginning of the year, the net increase will be added to farm cash receipts for the year. Accrual adjustments should be made to cash expenses for interest, rent, income taxes, and unpaid operating expenses. The operating expenses, such as for seed, chemicals, and farm supplies, are oftentimes identified by checking for accounts payable at farm supply businesses on the balance sheet date. A net increase in any of these types of accrued expenses during the accounting period will increase total accrual adjusted farm expenses and reduce accrual adjusted net farm income. Conversely, an increase in prepaid expenses, supplies, or investments in growing crops from one balance sheet date to the next should be deducted from farm cash expenses and will increase accrual adjusted net farm income in the current account period.

Accrual adjustments are first made on the balance sheet to completely and more accurately reflect all existing current assets and current liabilities as of one balance sheet date. Adjustments on the balance sheet and income statement must be made to account for the difference in recording when cash flows occur between cash and accrual systems.

On the balance sheet the following items must be adjusted:

- i. Inventories of grains produced and livestock held for sale (current market value)
- ii. Accounts receivable
- iii. Pre-paid expenses and supplies
- iv. Cash invested in growing crops (direct costs only)
- v. Accounts payable

- vi. Accrued expenses
- vii. Accrued interest
- viii. Income taxes and Social Security taxes payable
- ix. Deferred taxes

Second, accrual adjustments are made to the cash income statement, such that the accrual adjustments to cash income and expense correspond exactly to the accruals reported on the balance sheet. To perform the adjustments you will need accurate records of cash receipts and expenditures for the year. Once the records are in hand, go through the following process, beginning with gross revenues for the year.

Gross revenues

- Beginning inventories
- + Ending inventories
- Beginning accounts receivable
- + Ending accounts receivable

Operating Expenses

- Beginning accounts payable
- + Ending accounts payable
- Beginning accrued expenses
- + Ending accrued expenses
- + Beginning prepaid expenses
- Ending prepaid expenses
- + Beginning unused farm supplies (chemicals, seed, fuel, etc.)
- Ending unused supplies
- + Beginning investment in growing crops
- Ending investment in growing crops (don't include items from prepaid expenses)

Subtracting the accrual adjusted operating expense (including the depreciation expense) from the accrual adjusted gross revenue will give accrual adjusted net income, pre-tax.

The method of measuring accrual net income described above is an extension of the valuation method of measuring net income, which is contrasted with the transactions method of measuring net income in Appendix 1.

Accrual adjustments are made to achieve complete financial statement information and accurate matching of income and expense in an accounting period. A pure cash basis balance sheet would include only two amounts, i.e., cash (an asset) and owner equity. All other accounts reported on the farm financial statement are technically accrual adjustments. Unlike the accrual adjustments for current assets and liabilities described earlier, many of the accrual adjustments for noncurrent assets and liabilities will not directly affect the farm income statement. For example, neither buying farmland nor borrowing to finance the purchase requires an accrual adjustment to the farm income statement.

Gains or losses on the sale of farm capital assets and depreciation expense are the most common types of accrual adjustments related to changes in noncurrent asset accounts that do affect the farm income statement directly. Gains or losses should be scrutinized carefully to determine whether they are a regular and recurring part of business operations. If they are regular and recurring they should be included in the net operating income reported on the farm income statement. For example, gains or losses on the sale of culled raised breeding livestock are usually included when computing net farm operating income. Gains or losses that are infrequent in occurrence or unusual in nature are usually reported on the farm income statement as an adjustment to net farm operating when determining net farm income rather than including such extraordinary gains and losses in net farm operating income. Thus a gain from an insurance settlement received on a tractor because it burned up in a fire would be excluded from net income from farm operations.

The distinction between net farm income from operations and net farm income is significant because net farm income from operations is generally recommended as the more useful net income measure to use when computing certain key financial ratios. Examples of such ratios are the rate of return on assets, the rate of return on equity, and the operating profit margin ratio. The rationale for preferring net farm operating income for computing these ratios is that the net farm income from operations is more likely to predict future income than net farm income, which includes revenues that are unusual in nature or infrequent in occurrence.

Issue 2. Transactions Between the Business and its Owner(s)

The entity concept is one of the most fundamental concepts of business accounting and financial reporting. It states that a business should be viewed as a separate entity from its owners for accounting and financial reporting purposes. This simple concept has far-reaching ramifications in terms of its application.

It is the performance and financial condition of the business entity alone that we are attempting to measure. So it is critical to attribute assets, liabilities, and equity to the entity being evaluated: the farm. This can be quite difficult in some more complex business structures where there are different lines of business, or there are multiple business organizations for tax or legal reasons. It can also be quite difficult in situations where the line between business and personal assets is unclear. Nevertheless, it is still worth doing. Transactions between the owners and the business must be carefully recorded to accurately reflect their impact on owner equity. The personal equity of the owners' investment in the business is different than the equity that the business accumulates. For example, an expenditure of personal cash to purchase farm supplies increases farm expenses, but it also increases the farm owner's investment in the farm (owner equity). Both the increase in farm expenses and in farm owner equity must be captured in order to produce accurate financial statements for a farm business.

Issue 3. Personal Assets and Liabilities

Personal assets and liabilities should not be included in business financial statements. Such information, however, may be needed for financial reporting to farm lenders. When that is the case, caution must be exercised in presenting the information so that it won't affect (i.e. won't be included in) measures of financial condition and financial performance. If both farm and

personal assets and liabilities are reported on the farm business balance sheet, it is absolutely essential that they be carefully segregated from business assets and liabilities. Also, the owner equity section of such balance sheets will include personal equity in addition to the traditional components of farm business equity, i.e., retained earnings and contributed capital. This personal equity is not a productive investment in the business, so it should be segregated from the sources of business equity.

An accountant-prepared personal financial statement will be labeled a “Statement of Financial Condition.” Personal financial statements typically report one value for equity called “net worth.” A personal financial statement may be prepared for an individual or a married couple. Both personal and business assets will be listed in the statement at their estimated current values. However, only the net asset value for a business will be shown on the personal financial statement, under the heading “Investment in Farm Business.” So, farm business financial statements will generally be attached in explanation of that line item on the personal financial statement.

Owner-employees who accumulate assets from a retirement plan such as a Simplified Employee Pension (SEP) plan will usually own such assets personally. These assets are personal assets even though they would not exist if it had not been for the farm business. The farm owner’s residence and personal vehicles will generally also be personal assets. These assets and any corresponding liabilities should be included in the personal financial statement of the farmer or the farm family unit.

Issue 4. Non-Farm Off-Farm Income and Expense

The purpose of the income statement is to determine how well the business performed financially over the year. It measures the flow of inputs and outputs: fixed and variable costs, inventory changes and noncash items. When the owner’s labor and capital are used in the business, measuring income can be especially complex. For example, several things need to be excluded from net farm income to reach a figure that provides some usefulness in understanding the performance of the farm enterprise. After deducting taxes, family living expenses, social security taxes, and retirement savings, the remainder represents additions to retained earnings that can be reinvested in the firm if desired.

Many farm families have sources of income that have nothing to do with the farm business. Wages from any source, interest income earned on personal financial assets, and rent produced by assets owned by the farmer, rather than the farm, are examples of nonfarm income. These sources of income should be excluded when assessing farm business profitability since they aren’t income earned from farming. Family living expenses and personal capital expenditures should also be excluded.

Issue 5. Farm Business Organization

Farm businesses have a choice of ways in which to organize. The most common is as either a sole proprietorship or partnership. Others have chosen to gain the tax saving or liability reducing benefits of a corporation. The way in which a business is organized affects both the form and content of business financial statements.

The effect of the form of business organization on the format of business financial statements is most readily apparent in the equity section of the balance sheet. Corporate business entities typically will report values for accounts such as stockholder's equity and paid in capital from the issuance of corporate stock. Unincorporated entities such as sole proprietorships and partnerships will typically report one value, which may be labeled "Capital" or just "Owner Equity." It is very beneficial to be able to evaluate the composition of owner equity capital as to how much is retained earnings versus how much is capital contributed by the business owners.

Because of the widespread use of market value balance sheets in agriculture, the owner equity section of a farm balance sheet may also include valuation equity. Valuation equity is the difference between the market value of noncurrent assets reported on the farm balance sheet and the adjusted cost of those assets. Valuation equity is unearned and must be kept separate from retained earnings. On the statement of changes in owner equity, this specific source of equity should be listed separately from retained earnings and contributed capital.

The relatively common practice of using multiple forms of business organization within one family farm may necessitate combining the financial statements for each of these business entities into a consolidated set of financial statements for the farm as a whole. If the different forms of business organization exist primarily for tax or legal reasons, and the different entities are all managed as one business unit, then combining the financial information is a prerequisite for accurately analyzing the financial performance of the business as a whole.

The income statement is affected in two different ways by the choice of the business structure: accounting for the value of the labor and management provided by the owner, and the taxes that are attributable to operating the business. (See Issue 6 on owner compensation and Issue 7 on income tax liabilities.)

Issue 6: Owner Compensation

The way that a business is organized will affect how to account for the value of labor and management provided by the owner. Farms organized as either C or S corporations generally pay wages to their owner-employees. One consequence is that the liabilities and accrual-adjusted expenses on these farms will include employment taxes. Fringe benefits offered to farm employees may give rise to business expenses and liabilities. These will also affect the farm income statement.

Judgment is crucial in regard to determining whether compensation paid to S corporation and C corporation owner employees is reasonable relative to the value of their labor and management contributions to the farm business. S corporations, in particular, oftentimes provide an unreasonably low salary, in an attempt to hold down self-employment taxes. In such cases, the salary actually paid understates the value of the owner-operator's labor and management contributions to the farm and consequently profitability ratios such as ROA and ROE will be correspondingly overstated.

Proprietorships and partnerships don't pay wages to their owner-employees. The estimated value of unpaid operator and family labor and management must be deducted from net farm

income by sole proprietors and other farm business owners who aren't compensated directly by the farm business. This is a crucial adjustment for accurately measuring the performance of farm capital. The net farm income of proprietorships and partnerships includes a residual return to the farm owner-operator's labor and management, as well as a residual return on equity. The usual procedure for netting out the residual returns to labor and management is to use owner withdrawals from the business as an indicator of the value of unpaid operator and family labor and management. Farm corporations that pay their owner-shareholders a reasonable salary need not make this adjustment.

But there are many farms where owner withdrawals aren't a suitable indicator of the value of the farm operator's labor and management. For example, the farm operator's family may have nonfarm income that reduces or eliminates the need to draw from the farm. Or, the farm operator may withdraw more from the farm each year than the farm operator could reasonably expect to be paid if the operator worked full-time off the farm. The farm operator may work only part-time on the farm, but withdraw amounts equivalent to a full-time wage. In such cases, use the operator's best estimate of what his or her labor and management would be worth in the best job the farmer could obtain in the general marketplace for employment.

Annual total living expenses are another alternative to owner withdrawals as a means of estimating the adjustment to make to net farm income for the value of an owner-operator's or paid labor management University of Illinois research indicates that total living expenses averaged \$47,526 in 2000 for 1,087 farms participating in the Illinois Farm Business Farm Management Associations.

Issue 7. Income and Social Security Tax Liabilities

Income and social security tax liabilities are more often than not left out of farm financial statements. This has the potential to significantly understate farm expenses and liabilities. One reason for this is that certain forms of business organization are not taxpaying entities. These include sole proprietorships, partnerships, and S corporations. Financial statements for such entities generally don't report actual income taxes paid and don't accrue the estimated income tax that will be paid during the subsequent year as a liability on the year-end balance sheet. This is because the farm owners, rather than the farm, are the taxpaying entity. If income tax liabilities are reported anywhere in the financial statements of these types of businesses, it will be in the note disclosures that accompany the financial statements.

Businesses that are themselves taxpaying entities, such as regular corporations, generally report income taxes as an expense and accrue income tax liabilities. These taxpaying entities, such as a C corporation or complex trust, will always report actual tax payments as an expense on the farm income statement and will accrue tax liabilities on the farm balance sheet. Typically the income statements of taxpaying farm business entities report both income before income taxes (net farm income) and net income (after taxes). The comparability of farm financial measures is adversely affected by inconsistency in the reporting of tax liabilities by different farms using different forms of business organization. The Farm Financial Standards Council recommends calculating profitability ratios such as operating profit margin, the rate of return on assets, and the rate of return on equity on a pre-tax basis in order to avoid this problem and thus increase the comparability of farm profitability measures.

Issue 8: Deferred Income and Capital Gains Tax Liabilities

Deferred taxes are a particular type of income tax liability that arises from the difference between financial accounting and tax accounting. Deferred taxes result from differences in the time period in which income and expenses are recognized in financial statements and in income tax returns. Any farm whose income is different for financial and tax reporting purposes should expect to have a deferred tax liability or asset. This would occur, for example, any time income tax reporting is done on the cash basis, and accrual adjusted income is reported in the farm financial statements. Any farm that owns capital assets with market values that exceed their cost should also expect to have deferred tax liability on the difference. Deferred taxes should always be estimated if they have the potential to exist.

Business managers want to accurately measure periodic earnings, but when it comes to the Internal Revenue Service, the goal oftentimes is to show as little income as legally permissible. This can lead to the deferral of large amounts of taxable income and the corresponding tax liability into later years. But, in doing so, a company must acknowledge and account for future taxes due, which is the reason for deferred income taxes. Both income tax liabilities and deferred income tax liabilities can be very sizeable, and can have a significant impact on financial performance. So, if deferred taxes are likely to exist, then they should be included in the financial statements.

A study using actual balance sheet data from farms in New York, Illinois, Kansas, and Iowa to estimate deferred taxes was conducted to show how deferred taxes would affect farm liability and equity measures (LaDue, Cagley, Dawson and Brown). When deferred taxes were recognized on the balance sheets of the studied farms, total liabilities increased significantly relative to total assets. According to the study's authors, "The average level of taxes appears to be around 15 percent (of total assets) for crop farms and around 20 percent for livestock farms." "The higher rates for livestock farms result from significant investment in raised livestock, which have a zero tax basis." For an average farm situation, about 30 percent of farm equity would disappear as a result of recognizing deferred taxes.

Current liabilities would also increase in relation to current assets thereby indicating less liquidity. "For example, including deferred taxes reduces a 1.5 current ratio (current assets ÷ current liabilities) to 1.0 on the average Iowa grain/stock farm in the study." The current ratio is commonly used to measure the liquidity of a farm business, which is the capability of a business to pay its current obligations as they come due.

The authors concluded that recognizing deferred taxes on the balance sheet did not in fact increase the riskiness of the farms in the study, because the deferred tax liabilities already existed before they were added to the farm balance sheets. But, recognizing deferred taxes did provide farmers with more accurate measures of the riskiness of their farm businesses. For the same reason, they concluded that recognizing deferred taxes did not in fact change liquidity. Instead, it is more accurately measured. The authors also pointed out that one key financial measure (the rate of return on equity) would improve as a result of the more accurate measurement of farm liabilities and equity.

An example will illustrate the potential effect on profitability analysis of deferred taxes. This is what an illustrative balance sheet might look like without including the deferred taxes.

**White River Farms
Balance Sheet
31 December X2**

	<u>Tax Basis</u>	<u>Market Value</u>
Current Assets (grain)	\$0	\$150,000
NonCurrent Assets (machinery)	\$60,000	<u>\$150,000</u>
Total Assets		\$300,000
Total Liabilities		<u>0</u>
Owners Equity		\$300,000

White River Farms reported \$150,000 as the estimated fair market value of the grain inventory the farm intends to sell during the next few months. White River Farms is a sole proprietorship that pays/reports its taxable income on the cash basis. Thus its income tax basis in the raised grain will be \$0. James Johnson, the proprietor, estimates that he will pay taxes on his ordinary farm income at an average tax rate of 28%. A reasonable estimate of the deferred taxes on the raised grain inventory is \$42,000 (28% x \$150,000). The tax is a deferred liability because it wasn't due and payable in the year the grain was produced and recognized as income for financial statement purposes. Mr. Johnson similarly estimates that a 20% tax rate could be used to estimate the potential deferred tax rate liability on the \$90,000 of gain (market value exceeded cost) in the machinery reported on the financial statement and yet unrealized for income tax purposes. Thus, \$18,000 (20% x \$90,000) might be a reasonable estimate of the deferred tax liability associated with the machinery. He decided to report the liability on the grain as a current liability and the liability on the machinery as a noncurrent liability. As a result, a more complete balance sheet for the farm would look as follows:

**White River Farms
Balance Sheet
31 December X2**

	<u>Market Value</u>
Current Assets (grain)	\$150,000
NonCurrent Assets (machinery)	<u>\$150,000</u>
Total Assets	\$300,000
Current Liabilities (deferred taxes) –grain	\$42,000
NonCurrent Liabilities (deferred taxes) -machinery	<u>\$18,000</u>
Total Liabilities	<u>\$60,000</u>
Owners Equity	\$240,000

If White River Farms had a debt-to-asset ratio of 50 percent before deferred then it became 68 percent when the taxes are included. An ROE of 10 percent before became 18 percent afterward. These shifts indicate the significant effect that more complete financial information can have. An increase of 18 percentage points in the debt-to-asset ratio is the result of an increase in the amount of liabilities the business has relative to its total assets. The farm is less solvent than the incomplete information had indicated. On the other hand the owners of the business now know that they are earning a greater return on their investment than they thought they were. Recognizing deferred taxes on the farm balance sheet did not change the risk position of the business, but the manager's understanding of business performance and financial position significantly improved.

Estimating Deferred Taxes

Deferred taxes on noncurrent assets can be estimated by first subtracting the income tax basis of all assets from the market value of those assets in order to estimate the unrecognized taxable gain on those assets. Generally, this is a straightforward task for noncurrent assets, if the farm balance sheet reports both cost and market value information for each asset. The net cost value (adjusted cost basis) reported on the balance sheet is generally the income tax basis for such assets. An item by item comparison of cost and market values will yield the necessary information about the unrecognized taxable capital gain. Then multiply an appropriate tax rate for the farm business times the estimated gain, and the result is an estimate of deferred taxes. The estimated deferred taxes on noncurrent assets should be recognized on the farm balance sheet as a noncurrent liability.

Deferred taxes on current assets may initially be more difficult to estimate, because the balance sheet generally only reports one value for each class of current assets. This value will be the same as the tax basis for some assets, such as prepaid expenses. The income tax basis of other assets, such as raised grain and market livestock, will generally be zero for cash basis farm taxpayers, even though the balance sheet reports a value that approximates the market value of such assets. Generally an item by item evaluation of current assets will be required to determine the amount of difference between the tax basis of each class of current assets, if any, and the value recognized on the balance sheet. It is this difference that is used to estimate the current liability portion of deferred taxes. The difference is multiplied times an appropriate tax rate for the farm.

The tax rate and the resulting current portion of deferred taxes should reflect the extent to which it is more likely than not that the current deferred taxes will become due and payable during the year following the balance sheet date. It is important to realize that the liability for deferred taxes reported in the current section of the balance sheet can be triggered by a variety of business events. For example, farm businesses may have diminished capacity to continue to defer large amounts of deferred taxes when prices are low for extended periods of time. Other examples of potential triggering events are divorce, expansion, and retirement. Cash flow difficulties may lead to the need to sell assets that can trigger liability for noncurrent deferred taxes.

Example Computation: John Farmer plans to report 50,000 bushels of #2 yellow corn he raised this year on his ending balance sheet. The market value of the corn is \$100,000. John is a cash tax basis taxpayer, so his tax basis in the corn is \$0. John uses a marginal tax rate of 33.7 percent to estimate his deferred tax liability for this type of asset (federal, state, and self employment tax combined). He will report a current liability for deferred taxes of \$33,700 on his ending balance sheet.

Issue 9. Classifying Entries on the Balance Sheet

A prerequisite for accurate income measurement is proper classification of assets and liabilities on the farm balance sheet. A properly classified balance sheet reports current assets and liabilities separately and distinctly from noncurrent assets and liabilities. Classification affects both the income statement and the balance sheets, so, in effect, if an asset/liability is poorly classified then two mistakes have been made – one for each statement.

For example, if the market value of beef cows held for breeding is included in current assets, then the change in the market value of those breeding animals will distort accrual adjusted gross farm income and net farm income. Breeding animals are noncurrent assets and changes in their market value should not be allowed to affect income measurements. Proper classification of current assets and liabilities is a critical precursor to accurate income measurement since income measurement is particularly sensitive to accurate estimation and proper classification of current assets and liabilities.

Issue 10. Classification of Liabilities on the Balance Sheet

As with classification of the assets on the balance sheet (Issue 9), the amounts of principal and interest payable should be classified as current or noncurrent on the farm balance sheet. Term debt liabilities obligate the borrower to make principal repayments over a period longer than one year. Any part of the term debt principal obligation that is scheduled for repayment during the 12 months subsequent to the balance sheet date should be classified as a current liability. Term debt that will be paid beyond the next year is a noncurrent liability even if the farm lender doesn't call the loan a term loan. Examples are annually renewable farm master notes, carryover operating debts, and demand notes (unless there is reason to believe the entire balance of the loan will be demanded in the 12 months subsequent to the balance sheet date). The current liability component of all term debts typically are added together and reported on the farm balance sheet as "principal due on term debts" or "current portion of term debts." The remaining principal balance of each term debt should be reported separately in the noncurrent liabilities section of the farm balance sheet.

Interest expense owed on operating loans on the ending balance sheet date should be estimated and reported as a current liability on the ending balance sheet. Accrued interest expense on operating loans will usually be reported in a current liability category called either "accrued interest" or interest payable.

Only interest that has actually accrued on term debt obligations as of the balance sheet date should be reported on the farm balance sheet. Consider the following example. John's next annual payment on his farm land contract is due July 1 of next year. He is preparing the balance sheet for December 31 of the current year. His scheduled payment for next July 1 includes \$10,000 of principal plus interest equal to 7 percent of the loan's outstanding balance of \$100,000. Thus, his next payment will total \$17,000. On his December 31 balance sheet he should report the \$10,000 of principal due as a current liability. He should also report \$3,500 of interest payable as a current liability. The other \$3,500 of interest that he must pay next July 1 has not had time to accrue as of the balance sheet date, so he is not yet liable for that amount.

Issue 11. Valuation of Current Assets

Current assets should be carried at only one value on the farm business balance sheet: the value used to make accrual adjustments to the cash income statement. This will ensure that the income statement reports the same income implied by the change in working capital on the farm balance sheet from the beginning to the end of a year.

The valuation method for current assets generally varies by type of asset. For example, prepaid expenses and purchased supplies will be valued at their purchase cost. Generally accepted accounting principles call for reporting investments in growing crops and developing livestock at the lower value of either their cost or their market values. However, cost may not be known for raised product items and the tax cost of these products is generally \$0 if the cash basis is used for income tax reporting, which is not very useful information from a valuation perspective.

Generally accepted accounting principles permit valuation of raised crops and market livestock at their “net realizable values.” Net realizable value is the current sales price of the product less the estimated costs of selling the product. It is roughly equivalent to what we commonly refer to a market value in farm balance sheets. This is an acceptable valuation alternative to cost for inventories that: 1) have a reliable, readily determinable, and realizable market price, 2) have relatively insignificant and predictable costs of sale, and 3) are available for immediate delivery. For example soybeans raised on a farm and held in the farm bins at year end would clearly qualify for this type of valuation. Given requirement two, current fair market values would reasonably approximate net realizable value.

Once current assets are valued at their net realizable values, the value reported on the balance sheet will be added to farm revenues through the accrual adjustment process. It is important to recognize that the estimated net realizable value of such assets in essence becomes the cost value in those assets for all future financial reporting purposes. This is why the recording of current assets at market value (net realizable value) doesn’t result in valuation equity. Valuation equity associated with the market value of noncurrent assets is not reported as earned income on the farm income statement and shouldn’t be. The market value of current assets such as crops held for sale is reported as earned income on the accrual adjusted farm income statement in the year it is first reported on the ending balance sheet. Avoid confusion in farm balance sheets by recording only one value for each current asset, which is the one that you intend to use in the accrual adjustment process.

Monetary assets are valued at current monetary amounts (Anthony and Pearlman). Cash is a perfect example of a monetary asset. Monetary assets are reported on the balance sheet at what they are “worth” today, which is their current monetary value, rather than their cost.

A key point from these examples is that you should expect to see variety in the use of valuation methods even in a single balance sheet. The idea that a balance sheet will use one single valuation method consistently throughout is generally a misconception.

Issue 12. Valuation Of Noncurrent Assets

It seems intuitive that differences in asset valuation would have a significant impact on financial performance measures. Overstating or understating assets could have an adverse effect on understanding profitability. Any one of several measurement attributes/valuation methods may be used in farm financial statements. In their text on *Farm Management, Fourth Edition*, Ronald Kay and William Edwards state that the “choice will depend on the type of asset and the purpose of the valuation.” Their list of valuation methods, albeit incomplete, includes market value, cost, lower of cost or market, farm production cost, cost less accumulated depreciation, and book value. The two most common methods of valuing farm assets are historical cost and estimated current market value. A single farm balance sheet may report different assets using different valuation methods. With this in mind it is very important to be aware of the valuation methods when evaluating financial measures. It is equally important to disclose the valuation methods used in financial statements prepared for financial reporting to creditors and other external users of farm financial information.

Farm financial information is used for a variety of purposes, and the intended use is an important consideration when determining how assets should be valued. For example, one important use is credit analysis. For this use, current market values are very important. Current market value is the value that could be obtained from the sale of an asset when both the seller and buyer are willing and well informed. Another important use of financial information is trend analysis, which involves monitoring the financial progress of a farm over several accounting periods. Historical cost values are very useful in trend analysis, because cost is generally considered to be more conservative and less subject to estimation error than market value. Historical cost is the amount paid for an asset plus or minus any adjustments (oftentimes referred to as adjusted cost tax basis) to that amount after the purchase date. Adjustments include deductions from initial historical cost for depreciation and partial sales and additions for the cost of making improvements. Another potential use is comparative analysis or benchmarking. Market values are important in this type of analysis of financial performance. Market values are inherently more comparable across farms than cost values, particularly for long-lived assets such as machinery and land.

Market value and cost should be the same on the day an asset is acquired. After the purchase date, the two different valuation methods oftentimes produce different results. Some capital assets, such as land, may appreciate so that market value will exceed historical cost. Some assets will depreciate in value or will be depreciated, such as breeding livestock, farm machinery, and buildings. In such cases, market value may not change or may decline at a different rate than the rate being used to recognize annual depreciation of the historical cost of the asset. Generally, historical cost values will be the same as the adjusted tax basis of farmers’ depreciable assets, because farmers generally don’t maintain two different depreciation schedules for financial reporting and tax accounting purposes.

As a matter of practice, farms sometimes report two different values for each of their capital assets, i.e., cost and current market value, on the farm business balance sheet. Capital assets are reported in the noncurrent section(s) (intermediate and long-term assets) of farm balance sheets.

Many farm balance sheet formats will provide the opportunity to present a cost value and a market value for each noncurrent farm asset.

The change in the market value of noncurrent assets from year to year should not be recognized on the income statement. Instead, the change in market value should be reported in the statement of changes in owner equity. Equity changes should not be a factor in assessing farm profitability whatsoever. The change in market value equity should be segregated from retained earnings, if at all possible. Earned equity (retained earnings) growth is a much more reliable indicator of the financial progress of a farm business than market value equity growth. Earned equity growth (or decline) is measured using cost values for noncurrent assets.

Remember to exclude personal assets from this list of assets. While a lender might consider vehicles for personal use, or residences part of the farm business from the perspective that these things could be liquidated to repay debt, they should not be considered for farm business profitability analysis.

Issue 13: Leased Capital Assets

Assets controlled by means of an operating lease/rental arrangement are not reported on a farm business balance sheet. Operating leases typically are for relatively short periods of time when compared to the life of the leased assets. For example, land is oftentimes leased for one year at a time. It is appropriate to recognize unpaid rental payments as a current liability on the balance sheet. If the annual rent is paid in advance, it should be recognized as a prepaid expense on the balance sheet. Changes in the amount of rent owed or prepaid from one balance sheet date to the next will directly affect accrual adjusted expenses and net farm income. The general terms of each operating lease and the minimum lease payments should be reported in the note disclosures that accompany a balance sheet, because such information can be very important for assessing the future prospects of the farm business.

Capital leases, on the other hand, generally involve a noncancellable contract to make payments over a period of more than one year in exchange for the use of capital assets. To the extent that substantially all the benefits and risks of owning the asset are transferred to the lessor, a capital lease is tantamount to ownership and should be reported on the farm balance sheet. Generally, if the lease is in effect for most of the useful life of the leased asset, the lease is likely to be a capital lease. Both the leased asset and the corresponding lease liability should be reported on the farm financial statements. The leased asset should be classified as a noncurrent asset and recorded at its fair market value at the time of acquisition. The lease obligation is reported on the balance sheet very much like a term loan. Failure to recognize capital leases on the farm balance sheet can significantly distort the financial position reported for a farm business. This reporting is particularly important relative to accurately measuring the liquidity (current assets ÷ current liabilities) and working capital (current assets – current liabilities) of the farm business. Information on accounting for leases can be found in the guidelines published by the Farm Financial Standards Council, available at www.ffsc.org.

Summary

The purpose of the foregoing points was to illustrate important issues to consider when compiling farm financial statement information in order to produce complete, accurate, and consistent financial statements. Balance sheets that are complete and accurate are a necessary prerequisite for accurately measuring profitability and financial position. It is essential to start with accrual measures of income and expenses. An accrual-adjusted income statement that reports on the period bracketed by the beginning and ending balance sheets is another prerequisite. How assets are valued can produce significantly different values for key financial ratios such as the rate of return on assets, the rate of return on equity, and the asset turnover ratio. Valuation also affects the comparability of these ratios. Generally, market values should be used when the intent is to compare financial measures across farms. Cost based values are generally more conservative and are generally preferred as the basis for analyzing trends in farm performance over time. Finally, the usefulness of financial measures is greatly enhanced by efforts to produce financial statements that are more complete, accurate, and consistency both internally and from one accounting period to the next.

References

- Accounting Standards Division of the American Institute of Certified Public Accountants, "Statement of Position 85-3," *Accounting by Agricultural Producers And Agricultural Cooperatives*, April 30, 1985.
- Anthony, Robert N., and Leslie K. Pearlman, *A Review of Essentials Of Accounting, 7th edition*, Prentice Hall, 1999.
- Bagnall and Aukes, "Financial Reporting in Agriculture: In Need of a Reliable System," *Canadian Journal of Agricultural Economics*, 33 (1) (March 1985):83-98.
- Farm Income and Production Costs for 2000: Advance Report*, Extension Publication C1375A, University of Illinois at Urbana-Champaign, April 2001.
- Farm Financial Standards Council, *Financial Guidelines For Agricultural Producers*, November 1997.
- Kay, Ronald D., and William M. Edwards, *Farm Management, Fourth Edition*, WCB/McGraw-Hill, 1999.
- LaDue, Eddy, Charles Cagley, James Dawson, and Charles Brown, "Farm Business Equity Is Partly Illusion," *Journal of Ag Lending*, Summer 1999.
- Lins, David A. and Paul Ellinger. "Establishing Norms for Financial Performance Measures Part II: Profitability", *AgriFinance*, January 1992.
- Miller, W. Alan, and Freddie L. Barnard, "Preparing Reliable Farm Financial Statements: Conceptual and Procedural Issues," *Journal of the American Society of Farm Managers and Rural Appraisers*, Denver, CO, 1996.
- Miller, Alan, Michael Boehlje, and Craig Dobbins, *Key Financial Performance Measures For Farm General Managers*, Purdue University Cooperative Extension Service Publication ID-238.
- Miller, Alan, Michael Boehlje, Craig Dobbins, Dawn Miller, and Freddie Barnard. *Measuring and Analyzing Farm Financial Performance*, Purdue University Cooperative Extension Service Publication EC-712.

Appendix 1: Two Alternative Methods of Measuring Farm Income

The checklist in this publication is designed specifically to be most useful for farm businesses that must use the valuation method of determining income. However, it addresses issues that should also be considered in situations where the transactions method of determining income is used. For example, only the mechanics of how the accrual adjustments are made in compiling the financial statements will differ between the two alternative methodologies. The underlying principle that income should be measured on the accrual basis rather than on the cash basis, when evaluating farm business profitability, applies to both the transactions and valuation methods.

Traditionally, one of two quite different methods has been used for measuring farm income. One of these methods is called the “valuation method.” The other is called the “transactions method”. The choice of method is very much related to the type of record system used on a farm. The valuation method is most often associated with situations where relatively simple tax records are kept on the farm. The Schedule F of the farmer’s tax return may in fact be the closest thing to a formal financial statement on some farms. The valuation method is the only practical alternative for measuring income in this situation. Purdue Cooperative Extension Service Publication EC-712, *Measuring & Analyzing Farm Financial Performance*, provides worksheets for applying the valuation method when starting with a Schedule F from the farm income tax return. This publication can be found at the following web site address: www.agecon.purdue.edu/ext/fbm21/Ec712entry.htm/.

The valuation method has been very popular in agriculture. The valuation method requires a beginning and ending farm balance sheet and information about transactions (contributions and withdrawals) between the farm owner and the farm business. With this method net farm income (or loss) is computed as follows:

ending owners equity
- beginning owners equity
- contributed capital
+ owner withdrawals
= net farm income (or loss)

If the net result of the computation is positive, that is the amount of farm income produced. If the amount is negative, it is the amount of money the farm lost during the period. Generally, managers who use the valuation method want more detailed information than just net income and will prepare an income statement that adjusts major categories of cash farm income and expenses for changes in balance sheet values.

The transactions method generally presumes the use of a complete double entry accounting system. The most fundamental aspects of the transactions method are the following: 1) an account is maintained in the farm records for every amount reported in the farm financial statements, 2) every event that affects the farm business accounts is recorded in the farm records

as a transaction, 3) every transaction is recorded in a way that maintains the following balance sheet equality: $\text{Assets} = \text{Liabilities} + \text{Owner Equity}$. Income and expense transactions, including accrual adjustments to income and expense, are recorded in the farm accounts. Income transactions increase owner equity and expense transactions reduce owner equity.

The transactions method measures net farm income based on complete and accurate recording of farm business transactions. With this method net farm income (or loss) is the difference between farm revenues and farm expenses as recorded in the farm accounts. Farm revenues and expenses must be accrual-adjusted amounts that reflect changes in current asset and liability accounts, such as inventories, receivables, and accrued expenses. Farm financial statements are compiled from the balances in the farm accounts at the end of the accounting period. These balances reflect all transactions recorded during the accounting period including the revenues and expenses associated with business operations. A beginning balance sheet is not needed to produce accrual adjusted income measures using the transactions methods. Ending account balances on the farm balance sheet amount to the beginning balances as adjusted for actual transactions recorded in the farm accounts and accrual adjusting entries recorded in the farm accounts.

An income statement prepared from a double entry accounting system maintained on the accrual basis won't report the accrual adjustments to income on the face of the statement, because the accrual adjustments have already been made in the accounting system. Farmers who don't record accrual adjustments in the records will still need to make accrual adjustments on the face of the income statement similar to those described in the earlier discussion of Issue 1. The use of computerized double entry accounting systems on farms is changing the look of farm income statements, because these systems are designed to implement the transactions method. Such systems oftentimes have the added advantage of being able to produce both cash tax basis reports for income tax reporting and accrual adjusted account balances for financial analysis.

Theoretically, the two alternative methods, i.e., the valuation and transactions methods, should produce identical results assuming the values on the balance sheets are identical and income and expense recognition occur in the same accounting year. However, in practice, use of the valuation method can easily lead to internal inconsistency in the farm financial statements. Complete records and careful record keeping can do much to avoid inconsistency between the net income implied by the beginning and ending balance sheets and the net income reported on the income statement.

Appendix 2. General Purpose Financial Statements and Their Interrelationships

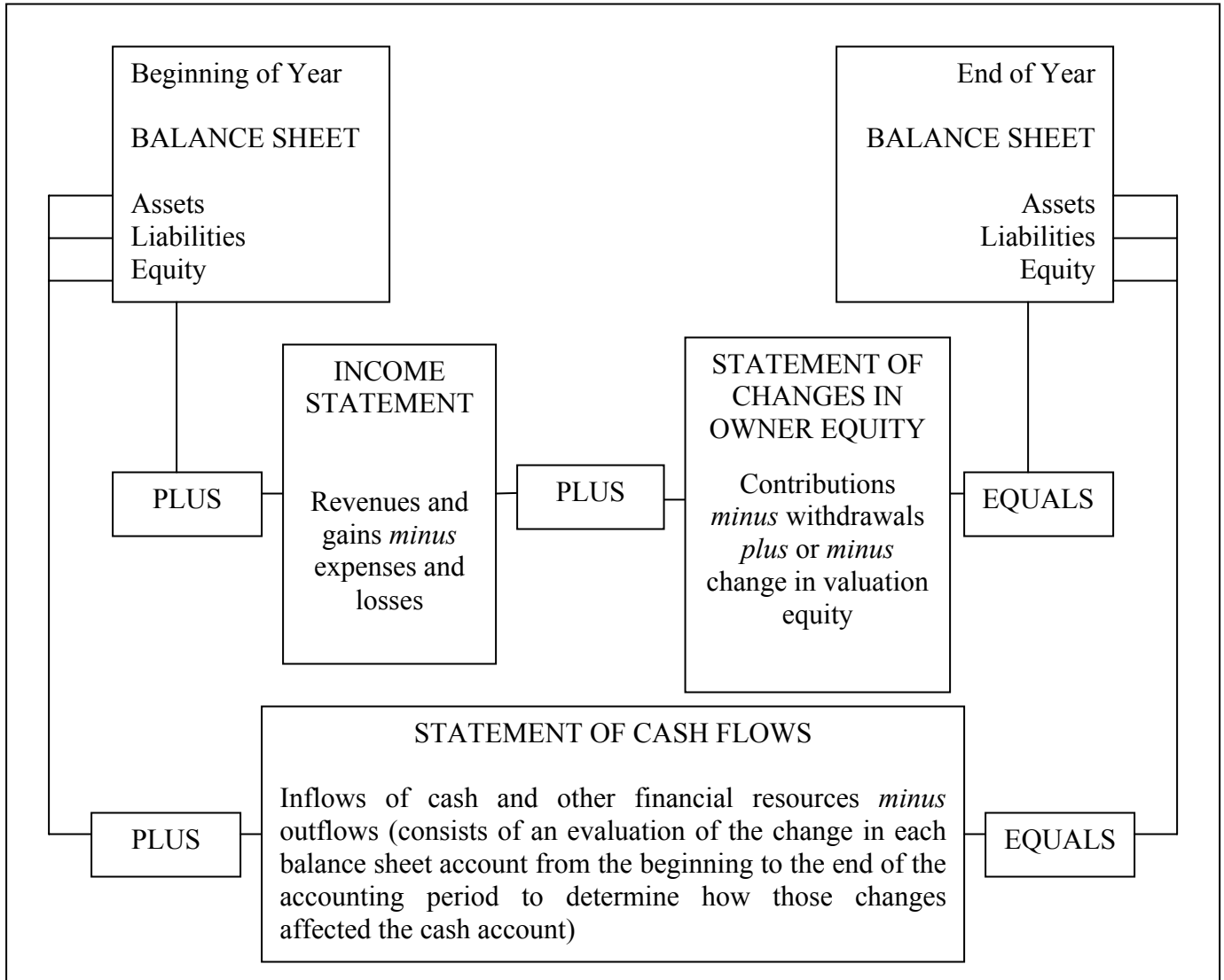
A farm business is not, in any way, fundamentally different than any other business. All businesses commonly produce a product or service with a given set of resources, and then sell it in the marketplace with the goal of earning a profit so that the business can continue. All businesses must assess assets, liabilities, revenue, expenses and equity. Agriculture, like many industries, has developed its own unique accounting and financial reporting practices. Agriculture is ahead of its time with respect to some of them and lags behind in other respects.

Producing complete and accurate information for financial analysis starts with preparing a complete set of general purpose financial statements. A complete set of general purpose, farm financial statements will include five documents:

- A balance sheet (both beginning and ending),
- An income statement,
- A statement of changes in owner equity,
- A statement of cash flows.

These statements are interrelated in a systematic, mathematical sense, as is depicted in Figure 1. The flows through the business reported on the income statement, the statement of changes in owner equity, and statement of cash flows should completely explain and account for the change in the financial position of the farm as reported in the balance sheets. If there is a discrepancy by even small amounts, this discrepancy is clearly an error. The net increase or decrease in cash transactions during the year should reconcile the change in cash from the beginning to the ending balance sheets to the penny, based on accounting of the cash flows during the accounting period. The same is true for the change in owner equity, based on the flows of revenues and expenses as adjusted for owner investments and withdrawals and changes in valuation equity.

Figure 1. Interrelationships of financial statements



Source: W. Alan Miller and Freddie Barnard. "Preparing Reliable Farm Financial Statements: Conceptual and Procedural Issues," *Journal of the American Society of Farm Managers and Rural Appraisers*, Denver, CO, 1996.

Figure 1 illustrates the important distinction between flows through a business that affect the balance of cash and flows that affect the balance of owner equity. Cash flows have nothing to do with income measurement. Businesses can have plenty of cash and no profitability or vice versa. Periodic profitability can only be measured by evaluating the flow of revenues and gains and expenses and losses for a particular accounting period.

Owner equity in an accounting system consists of retained earnings and paid-in or contributed capital. Retained earnings are the total accumulated profits retained by the business, which include prior year profits not withdrawn by the business owners. Paid-in capital includes the original investment in the business plus additional capital invested in the business over time. Owner withdrawals reduce retained earnings to the extent there are any and, if not, they reduce the business owners' invested capital. In a complete accounting system, changes to these components of owner equity will actually be recorded in the farm books.

An additional component of changes in owner equity is introduced any time that the cost values of noncurrent assets are re-valued on the farm balance sheet to reflect estimated fair market values. The difference between the cost/book values of noncurrent assets and their estimated market values as reported on a balance sheet for a particular date is called valuation equity. When market values are either written up or down relative to their cost or book values, the change is generally not recorded as a transaction in the farm accounting system. But, this change in market values from the beginning balance sheet to the ending balance sheet must be reconciled in the financial statements. The change in valuation equity represents value that the business owner may never really be able to cash in on, so the change should be typically reported on the statement of owner equity in a way that keeps it separate and distinct from earned equity change (retained earnings) and changes in contributed capital.

Accounting for agricultural production businesses has been, in several ways, different than accounting for non-farm businesses. Several practices have developed through time to aid farmers as they try to track the financial progress of their businesses. One of the key differences has been in the way that farms account for the value of their assets. Traditionally farmers have reported the *market* values of their assets on the balance sheets. Farmers have used a market-based value because of the fact that reliable cost information is not always available, and because external third party users required this information. Financial accounting focuses on producing so-called "general purpose financial statements" for external users of financial information. The most important external users of farm financial statement information have been farm lenders. Their need for financial information for both financial analysis and credit analysis has directly affected financial statement preparation in agriculture.

Farming is generally behind other industries in the accurate reporting of cost-based balance sheet information. Such information can greatly enhance our understanding of farm business performance, particularly in regard to the sources of and amounts of owner equity reported on farm balance sheets and trends in farm business performance over time.