

Risk Management

Financial and Economic Terms

Dean McCorkle and Danny Klinefelter*

General Accounting and Financing Terms

Generally accepted accounting principles (GAAP) — Concepts, philosophies and procedures that guide accounting practices and standards for different industries, but not a precise set of accounting rules. Several authoritative organizations and boards of the accounting profession are sources of GAAP, the most authoritative being the Financial Accounting Standards Board (FASB).

Pro forma statements — a financial statement or presentation of data that represents financial performance based on projections of events and conditions. Examples are a pro forma balance sheet and a pro forma income statement.

Cash and Cash Flow Terms

Cash — cash and funds in checking accounts, savings accounts and certificates of deposit. It is generated by business sales and other receipts minus cash operating expenses, debt payments, capital purchases and family living expenses.

Cash flow budget — similar to a statement of cash flows (defined below), but comprised of budgeted dollar amounts rather than the actual dollars flowing in and out of the business. A cash flow budget can be compared to the statement of cash flows periodically to determine if, when, and where the actual cash flows vary significantly from the budgeted amounts.

Cash flow statement — a financial statement that shows the dollars flowing in and out of the business. The cash flow statement is usually divided into operating, investing and financing activities. Cash flows are usually presented by the week, month, quarter or year for each income and expense category. This statement is particularly valuable for analyzing the management of cash in the business.

Liquidity — the ability of the business to generate sufficient cash to meet total cash demands without disturbing the on-going operation of the business.

Net cash flow from operations — the amount of cash available after cash operating expenses are subtracted from cash operating income.

Repayment capacity — measures the ability to repay debt from both farm and non-farm income. It evaluates the capacity of the business to service additional debt or to invest in additional capital after meeting all other cash commitments.

Income and Income Statement Terms

Accrual basis of accounting — a method of accounting under which revenues are recognized in the accounting period when earned regardless of when cash is received, and expenses are recognized in the accounting period when incurred regardless of when cash is paid.



*Extension Economist–Risk Management and Professor and Extension Economist, The Texas A&M System.

Cash basis of accounting — a method of accounting under which revenues are recorded when cash is received and expenses are recognized when cash is paid.

Income statement (or profit and loss statement) — a summary of accrual adjusted revenues and expenses for a specific time period such as an operating or accounting year. The income statement is useful in analyzing the financial performance or profitability of the business. An income statement can also be developed for a specific enterprise.

Profitability — the ability of the business to generate income in excess of expenses. Profitability can be analyzed using the income statement and balance sheet. (NOTE: For specific measures of profitability, please refer to L-5275, “Income Statement – A Financial Management Tool.”)

Gross Income Values

There are different measures of gross income or receipts from a business. Three important measures are:

Gross farm income (GFI) — the income from sales plus other receipts, minus the cost of items purchased for resale (such as feeder livestock), plus or minus changes in operating inventories. This accrual basis income reflects the value of production whether sold or not.

Gross revenue (GR) — the income from sales plus other receipts, plus or minus changes in operating inventories. This accrual basis income reflects the value of production whether sold or not.

Value of farm production (VFP) — the income from sales plus other receipts, minus the cost of items purchased for resale (such as feeder livestock), minus the cost of purchased feed, plus or minus changes in operating inventories. This accrual basis income reflects the value of production whether sold or not.

Expense or Cost Values

Various expense or cost values are used in economics and accounting. The definition, and thus derivation, will depend on the financial

statement being developed and in what context the business is being analyzed. Some important expense or cost values are:

Variable costs — expenses that vary with output for the production period under consideration. Seed, fuel, feed and fertilizer are examples of variable costs.

Fixed costs — expenses of an “overhead” nature that do not vary with changes in output for the production period under consideration. Real estate taxes, depreciation and interest on land are examples of fixed costs.

Cash costs — costs that result in an actual payment of cash. Example of cash costs include seed, fertilizer, labor and fuel.

Non-cash costs — costs that do not result in an actual payment of cash. Examples include depreciation, the change in prepaid expenses, changes in inventory, and accrued taxes.

Direct expenses — expenses such as fertilizer and seed that are directly related to a production activity.

Indirect expenses — expenses such as real estate taxes that are not directly related to a production activity.

Accrual farm expense — the amount of expense, even if not paid, that is associated with production for the operating or calendar year.

Depreciation — the allocation of the original cost of a capital asset over the useful life of the asset.

Financial costs — all expenses in the accrual adjusted income statements. Expenses include cash costs, depreciation, and non-cash adjustments such as accounts payable and accrued interest.

Prepaid expenses — expenditures made in the current operating or accounting period that will be used in a future period to realize revenue.

Total costs — the sum of fixed and variable costs.

The method of calculating total operating expenses or total expenses depends on what you are trying to analyze and which gross income

valuation method you use (GFI, GR or VFP). The following are three common methods of expense determination:

Total operating expenses (GFI) — the sum of cash and non-cash expenses plus or minus the associated accrual and expense inventory adjustments. It includes the cost of purchased feed, but does not include the purchase of items for resale or interest expense.

Total operating expenses (GR) — the sum of cash and non-cash expenses plus or minus the associated accrual and expense inventory adjustments. It includes the cost of purchased feed and purchases of items for resale, but does not include interest expense.

Total operating expenses (VFP) — the sum of cash and non-cash expenses plus or minus the associated accrual and expense inventory adjustments. It does not include the cost of purchased feed, purchases of items for resale, or interest expense.

Total expenses (GFI) — equal to total operating expenses (GFI) plus interest expense.

Total expenses (GR) — equal to total operating expenses (GR) plus interest expense.

Total expenses (VFP) — equal to total operating expenses (VFP) plus interest expense.

Net Income and Return Values

The income statement, which provides a summary of accrual adjusted gross revenue and expenses, in conjunction with the balance sheet, allows one to derive various net income and return values, such as:

Net farm income from operations — equal to gross farm income (GFI) minus total expenses (GFI), or gross revenue (GR) minus total expenses (GR), or value of farm production (VFP) minus total expenses (VFP).

Net farm income — equal to net farm income from operations plus the gain (or loss) from the sale of capital assets and the change in base values of breeding livestock. Net farm income is accrual adjusted and represents a return to operator's labor, management and equity capital.

Net profit margin — shows the portion of

gross revenue that the business receives as profit.

Return to capital — a measure of the operator's capital earnings from the business. It is equal to net farm income, plus interest expense, minus a charge for the operator's labor and management.

Return to management — a measure of the operator's management earnings from the business. It is equal to net farm income, minus a charge for the operator's labor and equity capital.

Return to labor and management — a measure of the earnings to labor and management from the business. It is equal to net farm income, plus hired labor expense, minus a charge for the operator's equity capital.

Return to capital, labor and management — a measure of the earnings to capital, labor and management from the business. It is equal to net farm income, plus hired labor expense, plus interest expense.

Assets, Liabilities and Balance Sheet Terms

Accumulated depreciation — the amount of depreciation expense taken on machinery, equipment and building assets from their acquisition date to the date of the balance sheet.

Average owner equity — the average of the beginning and ending owner equity for an operating or calendar year.

Balance sheet — a financial statement that shows the financial condition of the business at a particular point in time. The statement lists all assets and liabilities, and the resultant owner equity. Equity (net worth) should be analyzed by valuing assets at both the book value (cost minus accumulated depreciation) and the fair market value.

Book value — equal to the original cost or basis of an asset minus any accumulated depreciation. This information is usually obtained from the depreciation schedule.

Cost basis — another term for book value.

Leverage — the relationship between debt and equity. Earnings on debt must be greater

than the cost of debt to have a positive effect on business growth.

Market value — the value that would be received for the business's assets if the business were liquidated on the same date the balance sheet was prepared.

Statement of owner equity — a financial statement that reconciles the change in owner equity between the beginning and ending balance sheets.

Solvency — measures the amount of borrowed capital used by the business relative to the amount of owner's equity capital invested in the business. In other words, solvency measures the business's ability to repay all debts if all assets were sold. It also indicates the business's ability to withstand risks and continue operations after financial adversity.

Balance Sheet Assets

The asset side of the balance sheet will include the following types of values:

Assets — resources owned by or owed to the business such as livestock, equipment, real estate and notes receivable.

Current assets — cash and items that can be converted to cash with little loss in value. Current assets include cash, savings and time deposits, marketable securities, short-term notes receivable, and inventories expected to be turned over in the operating year such as feeder livestock, grain, supplies, prepaid expenses, and cash invested in growing crops.

Non-current assets — the breeding livestock, equipment, machinery, buildings and real estate of the business. Non-current assets may be grouped according to their economic life, such as intermediate (2 to 10 years) and long-term (more than 10 years).

Total assets — equals the sum of the business and non-business assets listed on the balance sheet.

Accounts receivable — the amount still owed you for products you sold or services you have rendered.

Balance Sheet Liabilities

The liability side of the balance sheet will include the following type of values:

Liabilities — debts owed by the business.

Current liabilities — debts that must be paid within 1 year. Included are principal payments on current loans, the portion of principal payments on non-current liabilities due within the current year, accounts payable, accrued interest, taxes, rents and leases.

Non-current liabilities — liabilities that will come due more than 1 year in the future. They include the principal balance of real estate and non-real estate loans and the non-current portion of deferred taxes.

Deferred taxes — contingent income tax liabilities that would be realized if all the farm assets were liquidated. Deferred taxes are separated into current and non-current portions.

Total liabilities — equals the sum of all liabilities (debt) listed on the balance sheet.

Accounts payable — the amount you still owe someone for products they delivered or services they rendered.

Retained earnings — a measure of the real growth in the business. It is equal to the change in net worth adjusted for inflation, or deflation, in asset values.

Owner equity or Net worth — the difference between total assets and total liabilities. This value indicates the dollar amount actually owned by the owner, and thus, represents the capital base available to handle adversity.

Economic and Other Terms

Economic analysis — considers the opportunity cost of equity capital and owned land in the calculation of costs. The analysis is a guide to finding the optimal use of resources for generating the highest net income possible for the business.

Economic cost — includes the opportunity costs charged for owned land (e.g., what it could be leased for) and owner equity capital (e.g., a 3-month treasury bill rate) in addition to fi-

nancial costs. Opportunity cost represents the return that could be received for a resource in its next best use.

Family living withdrawals — cash withdrawals paid by the business to cover family living expenses. In the context of the farming operation, family living withdrawals can be viewed as compensation for the owner/operator's management and labor. Actual withdrawals in excess of the amount needed to cover family living expense must be considered capital distributions in order to reconcile the retained earnings and statement of cash flows. Family living withdrawals, as compensation for the owner/operator's labor and management, are used to calculate the cost of production, return on assets, return on equity, and repayment capacity.

Financial efficiency — measures the degree of efficiency in using labor, management and capital. Efficiency analysis deals with the relationships between inputs and outputs. Inputs and outputs can be measured in physical as well as dollar terms, and there are obviously many ways to measure efficiency in physical terms. But the focus here will be on measures of financial efficiency.

Financial statements — provide accounting information regarding the financial position, net farm income, and net cash flow of the business. The balance sheet, income statement, statement of owner equity, and statement of cash flows comprise the basic set of financial statements.

Opportunity cost — the income that could have been received if a resource had been used

in the most profitable alternative way. The opportunity costs for long-term resources such as land, buildings and equipment are often difficult to estimate. One common method of estimating the opportunity cost for long-term assets is to apply to the value of the asset an interest rate that represents the cost of borrowed capital or the return on savings accounts. For owned land, another common method is to use a rental rate.

Savings and consumption margin — the after-tax income available for savings and consumption withdrawals or distributions. If withdrawals for family expenses and distributions exceed the savings and consumption margin, equity will decline if not offset by a change in the valuation of assets.

References

- McGrann, James M., John Parker, Nicole Michalke, Shannon Neibergs and Jeffrey A. Stone. *Glossary of Financial, Marketing, and Tillage Terms*. Crop SPA-10. December, 1996.
- Langemeier, Larry N., Rodney Jones, Fred D. DeLano, Terry L. Kastens and G.A. (Art) Barnaby, Jr. *Important Farm Business Terms Defined*. October, 1997.

Partial funding support has been provided by the Texas Corn Producers, Texas Farm Bureau, and Cotton Inc.—Texas State Support Committee.

Produced by AgriLife Communications, The Texas A&M System
Extension publications can be found on the Web at: <http://AgriLifeBookstore.org>.
Visit Texas AgriLife Extension Service at <http://AgriLifeExtension.tamu.edu>.

Educational programs of the Texas AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age, or national origin.

Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture. Edward G. Smith, Director, Texas AgriLife Extension Service, The Texas A&M System.