# Balance Sheet — A Financial Management Tool



**Department of Agricultural Economics** — www.agmanager.info

# Kansas State University Agricultural Experiment Station and Cooperative Extension Service

## Michael R. Langemeier

Professor, Agricultural Economics

A balance sheet is a statement of the financial condition of a business at a specific time. It is one of the principal reports provided by a good accounting system. The balance sheet shows what is owned in a business, what is owed, and the owner's share or net worth of the business. By comparing past balance sheets with the present balance sheet, the growth or decline of assets, loans, and net worth of a business can be determined.

The balance sheet shows the amount of funds the owner has in the business. To determine this amount, the assets owned are listed and a value is placed on them. The total value of liabilities also is listed. The difference between assets and liabilities equals net worth, which represents the owner's equity in the business. The balance sheet is often called a net worth statement. The net worth is equivalent to the value that would be left if all of the business and debt obligations were paid in full.

Assets may include cash on hand, marketable securities, accounts receivable, fertilizer and supplies, investment in growing crops, crops held for sale, feed, livestock, machinery and equipment, buildings, land, and other items. Although each asset may not be completely paid for, its full value is listed. The unpaid accounts, notes, and mortgages are listed as liabilities.

In many farm businesses, there is no sharp distinction between farm business and nonfarm assets and liabilities of the farm family. This is particularly true where the farm and family living expenses are paid for out of the same bank account. Funds may flow back and forth from farm to nonfarm items. In this kind of situation, the balance sheet may include both farm and nonfarm items.

The relationship of assets, liabilities, and net worth is expressed as follows:

Assets - Liabilities = Net Worth (Equity)

OR

Assets = Liabilities + Net Worth (Equity)

This accounting equation is expressed in the example balance sheet.

A current asset is cash or other assets that can be quickly converted into cash in the normal business processes within 1 year. The value of current assets may vary greatly over time. Crops may be harvested but held for a better market. Feeder livestock may be purchased or sold, resulting in a continual cash flow of funds into the business and out again.

Noncurrent assets are those resources that are used mainly to support farm production. Unlike current assets, they are not expected to be sold in the normal business process. These assets have a more permanent value. They are needed to produce income, but may not be easily converted to cash. They include breeding livestock, machinery and equipment, buildings, investments in cooperatives, and real estate.

Current liabilities include notes payable within a year, accounts payable, accrued expenses, income taxes payable, and the current portion of term debt.

Noncurrent liabilities include the noncurrent portion of notes payable and notes on buildings and land. Note that the portions of the noncurrent liabilities that are due within 12 months are current liabilities.

Table 1 presents a beginning, an ending, and an average balance sheet. From the example balance sheet statement, it may be noted that some of the assets are either in the form of cash or can be quickly converted to cash. Others would be more difficult to convert to cash. Some of the liabilities are debts that must be paid within a year. Others, such as real estate debt, are due over a period of years. Classification of assets and liabilities according to time provides information for planning purchases.

The example balance sheet in Table 1 does not contain current or noncurrent contingent tax liabilities. For an example that includes these liabilities see the following Farm Management Guide: *Computation of Deferred Tax Liability*, MF-2358.

Table 1 Balance Sheet (Farm Business Only)

·			
A CODETO	Jan. 1	Dec. 31	Average
ASSETS:			
Cash(1)	\$ 48,293	\$ 54,717	\$ 51,505
Marketable Securities(2)	0	0	0
Accounts Receivable(3)	1,897_	1,999	1,948
Fertilizer and Supplies(4)	26,009	32,049	29,029
Investment in Growing Crops(5)	0	0	0
Crops Held for Sale and Feed(6)	156,323_	186,620	171,472
Market Livestock(7)	80,656	81,369	81,013
TOTAL CURRENT ASSETS(8)	\$ 313,178	\$ 356,754	\$ 334,966
(Add Lines 1 through 7)			
Breeding Livestock(9)	\$ 56,773	\$ 57,259	\$ 57,016
Machinery and Equipment(10)	242,339	268,556	255,448
Buildings(11)	35,431	38,855	37,143
Investments in Cooperatives(12)	22,103	24,248	23,176
Land(13)	603,135	622,980	613,058
, ,		022,700_	013,038
TOTAL NONCURRENT ASSETS(14)	\$ 959,781	\$ 1,011,898	\$ 985,840
(Add Lines 9 through 13)			
TOTAL ASSETS(15)	\$1,272,959	\$ 1,368,652	\$ 1,320,806
(Add Lines 8 and 14)			
LIABILITIES AND OWNER EQUITY:			
Accounts Payable(16)	\$ 0	\$ O	\$ 0
Accounts Payable(16) Taxes Payable(17)	\$ 0	\$ <u>0</u>	\$ 0
Taxes Payable(17)	0	0	0
Taxes Payable(17) Accrued Expenses(18)			
Taxes Payable	<u>0</u> 4,217 0	4,300 0	0 4,259 0
Taxes Payable       (17)         Accrued Expenses       (18)         Current Portion: Deferred Taxes       (19)         Notes Due Within One Year       (20)	0 4,217 0 122,666	0 4,300 0 128,257	0 4,259 0 125,462
Taxes Payable	0 4,217 0 122,666 15,483	0 4,300 0 128,257 16,217	0 4,259 0 125,462 15,850
Taxes Payable       (17)         Accrued Expenses       (18)         Current Portion: Deferred Taxes       (19)         Notes Due Within One Year       (20)	0 4,217 0 122,666	0 4,300 0 128,257	0 4,259 0 125,462
Taxes Payable	0 4,217 0 122,666 15,483	0 4,300 0 128,257 16,217	0 4,259 0 125,462 15,850
Taxes Payable	0 4,217 0 122,666 15,483 2,000	128,257 16,217 2,000	0 4,259 0 125,462 15,850 2,000
Taxes Payable	0 4,217 0 122,666 15,483 2,000 \$ 144,366	128,257 16,217 2,000	0 4,259 0 125,462 15,850 2,000
Taxes Payable	0 4,217 0 122,666 15,483 2,000 \$ 144,366	128,257 16,217 2,000 \$ 150,774	0 4,259 0 125,462 15,850 2,000 \$ 147,570
Taxes Payable	0 4,217 0 122,666 15,483 2,000 \$ 144,366	128,257 16,217 2,000 \$ 150,774	\$ 147,570 \$ 0 125,462 15,850 2,000 \$ 147,570
Taxes Payable	0 4,217 0 122,666 15,483 2,000 \$ 144,366	128,257 16,217 2,000 \$ 150,774	0 4,259 0 125,462 15,850 2,000 \$ 147,570
Taxes Payable	0 4,217 0 122,666 15,483 2,000 \$ 144,366	128,257 16,217 2,000 \$ 150,774	\$ 147,570 \$ 0 125,462 15,850 2,000 \$ 147,570
Taxes Payable	0 4,217 0 122,666 15,483 2,000 \$ 144,366	0 4,300 0 128,257 16,217 2,000 \$ 150,774 0 67,885 142,182	0 4,259 0 125,462 15,850 2,000 \$ 147,570 0 66,348 138,962
Taxes Payable	0 4,217 0 122,666 15,483 2,000 \$ 144,366 0 64,811 135,742 \$ 200,553	0 4,300 0 128,257 16,217 2,000 \$ 150,774 0 67,885 142,182 \$ 210,067	0 4,259 0 125,462 15,850 2,000 \$ 147,570 0 66,348 138,962 \$ 205,310
Taxes Payable	0 4,217 0 122,666 15,483 2,000 \$ 144,366	0 4,300 0 128,257 16,217 2,000 \$ 150,774 0 67,885 142,182	0 4,259 0 125,462 15,850 2,000 \$ 147,570 0 66,348 138,962
Taxes Payable	0 4,217 0 122,666 15,483 2,000 \$ 144,366 0 64,811 135,742 \$ 200,553	0 4,300 0 128,257 16,217 2,000 \$ 150,774 0 67,885 142,182 \$ 210,067	0 4,259 0 125,462 15,850 2,000 \$ 147,570 0 66,348 138,962 \$ 205,310
Taxes Payable	0 4,217 0 122,666 15,483 2,000 \$ 144,366 0 64,811 135,742 \$ 200,553	0 4,300 0 128,257 16,217 2,000 \$ 150,774 0 67,885 142,182 \$ 210,067	0 4,259 0 125,462 15,850 2,000 \$ 147,570 0 66,348 138,962 \$ 205,310
Taxes Payable	0 4,217 0 122,666 15,483 2,000 \$ 144,366 0 64,811 135,742 \$ 200,553	0 4,300 0 128,257 16,217 2,000 \$ 150,774 0 67,885 142,182 \$ 210,067	0 4,259 0 125,462 15,850 2,000 \$ 147,570 0 66,348 138,962 \$ 205,310 \$ 352,880
Taxes Payable	0 4,217 0 122,666 15,483 2,000 \$ 144,366 0 64,811 135,742 \$ 200,553 \$ 344,919	0 4,300 0 128,257 16,217 2,000 \$ 150,774 0 67,885 142,182 \$ 210,067 \$ 360,841 \$ 1,007,811	0 4,259 0 125,462 15,850 2,000 \$ 147,570 0 66,348 138,962 \$ 205,310 \$ 352,880 \$ 967,926
Taxes Payable	0 4,217 0 122,666 15,483 2,000 \$ 144,366 0 64,811 135,742 \$ 200,553	0 4,300 0 128,257 16,217 2,000 \$ 150,774 0 67,885 142,182 \$ 210,067	0 4,259 0 125,462 15,850 2,000 \$ 147,570 0 66,348 138,962 \$ 205,310 \$ 352,880

# **Uses of the Balance Sheet**

A balance sheet has many important uses. Lending agencies use balance sheets to evaluate the financial position of most loan applicants. A balance sheet can be extremely useful to the owner of the business. Comparison of balance sheets over time will show how much the business net worth is increasing or decreasing. A balance sheet also can be used by the owner of a business to support a request for borrowed funds.

A balance sheet gives information on how best to meet liabilities. If liabilities are due in a short time, cash will be needed to pay them. If the sale of current assets will not raise sufficient funds and the loan cannot be renewed, then a long-term loan may need to be negotiated on the basis of long-term asset values.

Comparison of total current assets to total noncurrent assets helps determine if too much or too little capital is tied up in permanent investments. A farm business, consisting primarily of noncurrent assets, has less flexibility than one that has sufficient current assets. Some flexibility in the business should be maintained. A balance sheet provides the information for making these comparisons.

# **Evaluating the Balance Sheet**

A balance sheet of a farm business can be evaluated by:

- Comparison to balance sheets of the same business in previous years.
- Comparison to balance sheet data from other farms.
- Use of financial ratios.
- Use of a "common-size" statement.

#### Comparison to Previous Years

One of the most effective methods of evaluating the balance sheet is comparison of one year to previous years for the same business. Comparison of balance sheets between years directs attention to changes that have occurred in the relationship between assets and liabilities and the resulting growth or decline in net worth of the business.

#### Comparison to Other Farms

Comparison of the balance sheet of a farm business to balance sheet data from successful farms of a similar type may give evidence of weak or strong points in the business.

## **Use of Financial Ratios**

Financial ratios can be used to evaluate the appropriate relationship between current assets and current liabilities, and total assets and total liabilities. Liquidity and solvency measures are computed using balance sheet data.

For more information about financial ratios used in farm financial management, see the Farm Management Guide *Financial Ratios Used in Financial Management*, MF-270.

### **Common-Size Statement**

When different sized operations are compared, use of percentages rather than actual dollars has some advantages. This approach is called a common-size statement. Each farm is put on a "common-size" basis; that is, the various assets, liabilities, and equity are expressed as percentages within the business.

An example common-size statement is shown in Table 2. This example uses the end of the year column in Table 1. In the common-size statement approach, the individual assets are listed as a percentage of the total assets. The individual liabilities and equity also are listed as a percent of the total liabilities plus equity. For example, total farm assets in the example balance sheet amount to \$1,368,652. Each asset is then expressed as a percentage of this figure. Crops held for sale and feed in the example totaled \$186,620. This is approximately 13.64 percent of the total.

In evaluating the comparative strength of a business, the percentage method shows some significant features. This method indicates the distribution of items, but does not give evidence of growth or decline. It shows the proportion of investments that is tied up in current and noncurrent assets. It indicates the financial structure in terms of the proportion that is furnished by the owner and by the short-term and long-term lenders. In the example, 26.07 percent of the farm investment is made up of current assets and 73.93 percent of noncurrent assets. Current liabilities make up 11.02 percent and noncurrent liabilities make up 15.25 percent of the total farm liabilities and equity. Equity makes up 73.64 percent of the total farm liabilities and equity, thus the owner is furnishing 73.64 percent of the total funds in the farm business.

For further information on farm financial management, see the following Farm Management Guides:

MF-270 Financial Ratios Used in Financial Management

MF-275 Cash Flow Projection for Operating Loan Determi-

MF-288 How Much Debt Can A Farm Carry?

MF-294 Income Statement - A Financial Management Tool

MF-2358 Computation of Deferred Tax Liability

Table 2. Common Size Balance Sheet

Amoun	t Percent	Amount	Percent	
ASSETS:		LIABILITIES AND OWNER EQUITY:		
Cash \$ 54,717	4.00%	Accounts Payable\$	0.00%	
Marketable Securities 0	0.00%	Taxes Payable 0	0.00%	
Accounts Receivable	0.15%	Accrued Expenses	0.31%	
Fertilizer and Supplies	2.34%	Current Portion: Deferred Taxes 0	0.00%	
Investment in Growing Crops 0	0.00%	Notes Due Within One Year 128,257	9.37%	
Crops Held for Sale and Feed 186,620	13.64%	Current Portion of Term Debt 16,217	1.18%	
Market Livestock	5.95%	Accrued Interest	0.15%	
TOTAL CURRENT ASSETS \$ 356,754	26.07%	TOTAL CURRENT LIABILITIES \$ 150,774	11.02%	
Breeding Livestock \$ 57,259	4.18%	Noncurrent Portion: Deferred Taxes \$ 0	0.00%	
Machinery and Equipment	19.62%	Noncurrent Portion: Notes Payable 67,885	4.96%	
Buildings	2.84%	Noncurrent Portion: Real Estate Debt 142,182	10.39%	
Investments in Cooperatives	1.77%			
Land	45.52%	TOTAL NONCURRENT		
		LIABILITIES \$ 210,067	15.35%	
TOTAL NONCURRENT ASSETS \$1,011,898	73.93%	,		
, ,		TOTAL LIABILITIES \$ 360,841	26.36%	
TOTAL ASSETS\$1,368,652	100.00%	,		
		OWNER EQUITY \$1,007,811	73.64%	
		TOTAL LIABILITIES		
		AND OWNER EQUITY \$1,368,652	100.00%	

Publications from Kansas State University are available on the World Wide Web at: www.ksre.ksu.edu

Publications are reviewed or revised annually by appropriate faculty to reflect current research and practice. Date shown is that of publication or last revision. Contents of this publication may be freely reproduced for educational purposes. All other rights reserved. In each case, credit Michael R. Langemeier, *Balance Sheet—A Financial Management Tool*, Kansas State University, November 2011.

#### Kansas State University Agricultural Experiment Station and Cooperative Extension Service

MF-291 November 2011