Balance Sheet-A Financial Management Tool

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A balance sheet is a statement of the financial position of a business at a specific point in time. 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 balance sheets over time, the growth or decline of assets, liabilities, and net worth of a business can be determined and evaluated.

The balance sheet shows the amount of investment the owner has in the business. To determine this amount, the assets owned are listed and a value is placed on them. The value of the liabilities of the operation also are 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, 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. Any unpaid accounts, interest, and loans 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, where funds may flow back and forth from farm to nonfarm items. Although this is common, it is highly recommended that separate accounts be used for farm and nonfarm items. In many situations both farm and non-farm items may be reflected on a balance sheet but should be clearly separated and defined when possible.

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

$$Assets - Liabilities = Net\ Worth\ (Equity) \quad \text{OR} \quad Assets = Liabilities + Net\ Worth\ (Equity)$$

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 land.

Current liabilities include current loans due within 1 year (i.e. operating notes), accounts payable/accrued expenses, income & social security taxes payable, and the current portion of term debt.

Noncurrent liabilities include the noncurrent portion of intermediate and long-term loans. Note that the portions of the noncurrent liabilities that are due within 12 months are current liabilities.

Figure 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 machinery and land debt, are due over a period of years. Classification of assets and liabilities according to time provides information for financial analysis, cash flow planning and other purposes.

Figure 2 provides a blank version of Figure 1 that can be used to build a farm's own balance sheet. Appendix 1 gives an explanation for each line item in the financial statement. This balance sheet can also be found in Excel spreadsheet format at www.AgManager.info/tools, called "KSU-Integrated Financial Statements", which will automatically calculate totals and relevant financial ratios.

It should also be noted that keeping underlying "schedules" is important for remembering detail under each line item. For example, Figure 3 shows detail for *Fertilizer and Supplies* and *Current Portion of Term Debt*. By recording these in detail each year, the same considerations will be made each time the balance sheet is updated and values will be consistent to compare across years.

The example balance sheet in Figure 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*.

Valuation of Assets on the Balance Sheet

As a balance sheet is prepared, it is necessary to give appropriate consideration to the valuation of assets. This will be discussed briefly here. It is common for farm business balance sheets to be prepared using market valuation, with the value of each asset representing the current fair market value. Cost-basis valuation is also used, with assets valued at their original cost less any accumulated depreciation. The difference in valuation methods primarily affects capital assets (i.e. breeding stock, machinery/equipment, land) while current assets are typically handled similarly in both methods, with inputs and supplies at cost and assets for sale in the next year at market price. Market valuation can be useful for measuring the net worth position of the operation and for identifying the available security value for debt obligations. Cost-basis valuation can help with consistency between balance sheets and is useful to identify and assess the net worth that has been earned through the production activities of the farm. An additional valuation method, modified-cost basis, will include modifications to the value of capital assets on the balance sheet periodically (i.e. every 5 years) so the asset values more closely represent market values but still allow measuring and assessing earned changes to net worth. Completion of two balance sheets, or a balance sheet utilizing separate columns for both market valuation and cost-basis valuation for capital assets, can provide the benefits of both valuation methods.

Valuation of capital (or financial) leased assets needs to be considered when completing a balance sheet. An operating lease (payment for short-term or seasonal use of an asset) may be shown as a note on the balance sheet. Capital leases, however, require a series of payments for a specified period of time that effectively transfer ownership of the asset. With a capital lease, the lease if a direct substitute for debt

financing for the purchase of the asset. In this instance, the value of the capital item should be listed on the balance sheet and be depreciated. The amount owed on the lease is shown as a liability.

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. Along with other financial statements, 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 (such as the case in the example farm in Figure 1).

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. *Working Capital*, calculated by taking current assets minus current liabilities, gives snapshot of how much cash is available to purchase inputs and inventory items after all current obligations are met with current funds. 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.
- Computation and use of financial ratios.

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 allows assessing changes that have occurred in the relationship between assets and liabilities and the resulting growth or decline in net worth of the business. Attention can also be given to changes in the relationship between current and noncurrent assets and liabilities over time, identifying the difference in financial position this creates. To appropriately complete this evaluation, the balance sheets to be compared should be completed using the same asset valuation method and at the same point in time each year.

Comparison to Other Farms

Comparison of the balance sheet of a farm business to balance sheet data from farms of a similar type or similar farm size may give evidence of weak or strong points in the business. Kansas Farm Management Association reports are available for this purpose at www.AgManager.info/KFMA or financial ratios from the balance sheet can be benchmarked against similar farms using the KSU-Farm Financial Benchmarking

Tool, also available on www.AgManager.info under the "Tools" section.

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 *Financial Ratios Used in Financial Management.*

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

Financial Ratios Used in Financial Management
Cash Flow Projection for Operating Loan Determination
Income Statement - A Financial Management Tool
Computation of Deferred Tax Liability

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BALANCE SHEET for	Joe and Jean Farmer			2017
ASSETS:				
	January 1	**December 31**	**Average**	**Notes**
1) Cash	$13,019	$7,473	$10,246	
2) Accounts Receivable	$205	$550	$378	
3) Fertilizer and Supplies	$67,905	$80,600	$74,253	
4) Investment in Growing Crops	$45,563	$30,375	$37,969	
5) Crops Held for Sale and Feed	$50,850	$52,875	$51,863	
6) Market Livestock	$37,800	$36,750	$37,275	
7) Other Current Assets	$0	$0	$0	
8) TOTAL CURRENT ASSETS	$215,342	$208,623	$211,982	(adds lines 1-7)
9) Breeding Livestock	$295,100	$296,200	$295,650	
10) Machinery and Equipment	$465,035	$423,279	$444,157	
11) Buildings	$40,201	$71,040	$55,621	
12) Investments in Cooperatives	$25,453	$27,763	$26,608	
13) Land	$1,904,000	$1,904,000	$1,904,000	
14) TOTAL NONCURRENT ASSETS	$2,729,789	$2,722,282	$2,726,036	(adds lines 9-13)
15) TOTAL FARM ASSETS	**$2,945,131**	**$2,930,905**	**$2,938,018**	(adds lines 8 & 14)
LIABILITIES AND NET WORTH:				
	January 1	**December 31**	**Average**	**Notes**
16) Accounts Payable/Accrued Expenses	$550	$800	$675	
17) Income & Social Security Taxes Payable	$16,500	$17,810	$17,155	
18) Current Portion: Deferred Taxes	$0	$0	$0	
19) Current Loans Due Within One Year	$130,048	$150,000	$140,024	
20) Current Portion of Term Debt	$80,578	$72,019	$76,299	
21) Accrued Interest	$28,477	$25,660	$27,069	
22)TOTAL CURRENT LIABILITIES	$256,153	$266,289	$261,221	(adds lines 16-21)
23) Noncurrent Portion: Deferred Taxes	$0	$0	$0	
24) Noncurrent Portion: Intermediate Loans	$154,933	$112,497	$133,715	
25) Noncurrent Portion: Long-term Loans	$526,495	$496,552	$511,523	
26) TOTAL NONCURRENT LIABILITIES	$681,428	$609,049	$645,238	(adds lines 23-25)
27) TOTAL FARM LIABILITIES	**$937,581**	**$875,338**	**$906,459**	(adds lines 22 & 26)
28) FARM NET WORTH	**$2,007,549**	**$2,055,567**	**$2,031,558**	(subtracts line 27 from 15)
29) TOTAL LIABILITIES AND NET WORTH	**$2,945,131**	**$2,930,905**	**$2,938,018**	(adds line 27 & 28)
	January 1	**December 31**	**Average**	**Notes**
30) Total Personal Assets	$0	$0	$0	
31) TOTAL FARM AND PERSONAL ASSETS	**$2,945,131**	**$2,930,905**	**$2,938,018**	(adds lines 15 & 30)
32) Total Personal Liabilities	$0	$0	$0	
33) TOTAL FARM AND PERSONAL LIABILITES	**$937,581**	**$875,338**	**$906,459**	(adds lines 27 & 32)
34) PERSONAL NET WORTH	$0	$0	$0	(subtracts line 32 from 30)
35) TOTAL FARM AND PERSONAL NET WORTH	**$2,007,549**	**$2,055,567**	**$2,031,558**	(subtracts line 33 from 31)

Figure 1. Example Balance Sheet

BALANCE SHEET for					
ASSETS:					
	January 1	**December 31**	**Average**		**Notes**
1) Cash					
2) Accounts Receivable					
3) Fertilizer and Supplies					
4) Investment in Growing Crops					
5) Crops Held for Sale and Feed					
6) Market Livestock					
7) Other Current Assets					
8) TOTAL CURRENT ASSETS					
9) Breeding Livestock					
10) Machinery and Equipment					
11) Buildings					
12) Investments in Cooperatives					
13) Land					
14) TOTAL NONCURRENT ASSETS					
15) TOTAL FARM ASSETS					
LIABILITIES AND NET WORTH:					
	January 1	**December 31**	**Average**		**Notes**
16) Accounts Payable/Accrued Expenses					
17) Income & Social Security Taxes Payable					
18) Current Portion: Deferred Taxes					
19) Current Loans Due Within One Year					
20) Current Portion of Term Debt					
21) Accrued Interest					
22)TOTAL CURRENT LIABILITIES					
23) Noncurrent Portion: Deferred Taxes					
24) Noncurrent Portion: Intermediate Loans					
25) Noncurrent Portion: Long-term Loans					
26) TOTAL NONCURRENT LIABILITIES					
27) TOTAL FARM LIABILITIES					
28) FARM NET WORTH					
29) TOTAL LIABILITIES AND NET WORTH					
	January 1	**December 31**	**Average**		**Notes**
30) Total Personal Assets					
31) TOTAL FARM AND PERSONAL ASSETS					
32) Total Personal Liabilities					
33) TOTAL FARM AND PERSONAL LIABILITES					
34) PERSONAL NET WORTH					
35) TOTAL FARM AND PERSONAL NET WORTH					

Figure 2. Blank Balance Sheet

Schedule 3-Fertilizer and Supplies	
Fertilizer/Lime	$36,000
Fuel and Oil	$2,500
Feed	$6,700
Seed	$35,400
Total	$80,600

Schedule 20-Current Portion of Term Debt	
Air Seeder Loan	$21,181
Bred Heifer Loan	$6,681
Tractor Loan	$14,575
New Land Note	$25,206
Old Land Note	$4,376
Total	$72,019

Figure 3: Example Schedules to keep underlying detail of Balance Sheet Categories

Appendix I. Balance Sheet Terminology and Explanations

1) **Cash-** Balance of the farm checking, savings, and other cash accounts as of the date of the balance sheet.
2) **Accounts Receivable-** Any bills or money owed to you but not yet paid on the balance sheet date. Ex: Crop insurance indemnities not yet received, bills for custom work performed, etc.
3) **Fertilizer and Supplies-** Anything pre-purchased or applied that was not yet "used" for production. Ex: Fuel in fuel barrels, pre-paid seed and chemicals, fertilizer applied but not yet planted to a crop, purchased feed on hand, etc.
4) **Investment in Growing Crops-** Any crops currently planted but not yet harvested on the balance sheet date and/or value of perennial crops. Value at lower of total establishment cost or crop insurance guarantee. Make sure to not double-count inputs with “fertilizer and supply” category.
5) **Crops Held for Sale and Feed-** Value of any crops, hay, or other feed held in inventory on balance sheet date (not already included in "supplies"). Include any items that have been priced using a deferred price agreement. All other items should be valued at the market price on the date of the balance sheet.
6) **Market Livestock-** Value of livestock that are planned to be sold in 1 years’ time. Ex: Feeder/backgrounding calves, cull cattle on feed, etc
7) **Other Current Assets**- Any other assets that could be converted to cash within 1 year that do not fit in the categories above. Ex: Hedging account balance
8) **Total Current Assets**- Adds lines 1-7 above. Total of all assets that could be converted to cash within 1 year.
9) **Breeding Livestock**- Total value of all cows, bulls, and replacement heifers on hand (or equivalent of other species)
10) **Machinery and Equipment**- Total value of all tractors & machinery, tools, livestock handling equipment, etc.
11) **Buildings**- Value of all barns, machinery/crop storage facilities, house (if included as part of the farm), etc.
12) **Investment in Cooperatives**- Current stock values held in cooperatives
13) **Land**- Total value of all land owned by the farm business
14) **Total Noncurrent Assets-** Total of Lines 9-13. Value of assets used for agricultural production, but not sold within the normal business process
15) **Total Farm Assets-** Total of Lines 8 and 14. Total of all assets held in the farm business

16) **Accounts Payable/Accrued Expenses-** Any outstanding bills to be paid or services received that were not yet billed on the balance sheet date. Ex: Remaining real estate taxes, commercial crop storage, co-op account balance, etc.
17) **Income & Social Security Taxes Payable-** Anticipated income & social security taxes payable on balance sheet date
18) **Current Portion: Deferred Taxes-** Typically only included on the balance sheet if capital asset sales or farm liquidation will take place. See publication *Computation of Deferred Tax Liability* for more information on how this can be calculated.
19) **Current Loans Due within One Year-** Operating loan balance(s) on balance sheet date
20) **Current Portion of Term Debt-** Principle balance of intermediate and long-term loans that must be paid within the next year
21) **Accrued Interest-** Interest that has accumulated on all loans from the last payment to balance sheet date
22) **Total Current Liabilities-** Adds lines 16-21 above. Total of all liabilities that are due within 1 year.
23) **Noncurrent Portion: Deferred Taxes-** Typically only included on the balance sheet if capital asset sales or farm liquidation will take place. See publication *Computation of Deferred Tax Liability* for more information on how this can be calculated.
24) **Noncurrent Portion: Intermediate Loans-** Principle balance of machinery, breeding livestock, and other loans that is not payable this year
25) **Noncurrent Portion: Long-term Loans-** Principle balance of all Real Estate and other Long-term loans (restructures) that is not due this year
26) **Total Noncurrent Liabilities-** Adds lines 23-25. Total liabilities due past 1 year.
27) **Total Farm Liabilities-** Adds lines 22 and 26. All liabilities due on the farm
28) **Farm Net Worth-** Subtracts line 27 from line 15. This is the total amount of capital owned by the farm business after all debt is paid with assets
29) **Total Liabilities and Net Worth-** Adds lines 27 & 28. Will also equal line 15 as all assets are either furnished by owner equity or credit
30) **Total Personal Assets-** Total value of all personal checking, savings, vehicles, land, and other personal property
31) **Total Farm and Personal Assets-** Adds Lines 15 & 30. Total of all assets in the farm business and personally held by farm owners
32) **Total Personal Liabilities-** Total of all personal outstanding debts Ex: Credit cards, vehicle loans, home loans, etc.

33) **Total Farm and Personal Liabilities-** Adds Lines 27 & 32. Total outstanding debt of the farm business and personal debt of farm owners

34) **Personal Net Worth-** Subtracts line 32 from line 30. This is the total amount of personal capital owned by the farm operator after all debt is paid with assets

35) **Total Farm an Personal Net Worth-** Subtracts line 33 from line 31. This is the total amount of capital owned by the business and farm operator after all debt is paid with assets