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Using the Balance Sheet for Management Decisions

By

Dr. Burton W. Pflueger*

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Using the Balance Sheet for Management Decisions

The balance sheet is sometimes referred to as the statement of net worth or the statement of financial position. The balance sheet is a summary of all assets and liabilities of the business at a specific point in time. A comparison of the current balance sheet with those from prior years will allow the manager to detail the growth or decline in the value of assets, the changes in loan principal balances and the changes in the owner's share of the business as measured by net worth.

On a balance sheet, the assets owned and their value is usually listed on the left-hand side of the statement. The liabilities (debts owed) and their values are listed on the right-hand side of the statement. Total liabilities reflect what portion of the business is owned by others. The difference between assets and liabilities equals net worth, or the owner's share in the business. The net worth is the generally regarded as the dollar amount the owner could claim if all debt obligations were paid in full.

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

\[ \text{Assets} - \text{Liabilities} = \text{Net Worth (Equity)} \]

OR

\[ \text{Assets} = \text{Liabilities} + \text{Net Worth (Equity)} \]

Asset and Liabilities Categories

General accepted accounting principles state that there are only two categories for assets, current and non-current, and two categories for liabilities, current and term. A current asset is cash or other assets that are expected, by normal business practice, to be converted into cash within 1 year. Grain and livestock inventories that are being held, but, which the manager expects to sell in the next business year, are considered current assets. 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.

Non-current assets are those resources that are used mainly to support the production activities of the business. 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 converted to cash easily. They include breeding livestock, machinery and equipment, buildings, and real estate.

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1 This information has been adapted for use in South Dakota from Balance Sheet - A Financial Management Tool by Larry Langemeier and Danny Klinefelter. RM5-5.0.5-98
Some agricultural balance sheets use different categories for assets and liabilities. The alternative classification of assets uses intermediate and long term assets categories. Intermediate assets would include those assets that have an expected useful business life of one to five years. For many farm and ranch operations, breeding livestock, machinery and equipment would be classified as intermediate assets. Long term assets would include real estate and buildings.

Current liabilities are those obligations that will be paid in the normal course of business within the next business year. Current liabilities include accounts payable, accrued interest and other expenses, income taxes payable, and the current portion of deferred taxes.

Non-current liabilities include the principal balances of loans that would not be paid within the next business year. For some agricultural operations, non-current liabilities are also classified as intermediate or long term liabilities. The criterion for classifying liabilities is the same as the criteria used for classifying assets. Generally, if there is debt obligation against an asset, both the asset and the debt obligation will receive the same classification – either intermediate or long term.

Uses of the Balance Sheet

The balance sheet has many important uses. The balance sheet statement can be extremely useful to the owner of the business because it reports the level of net worth which indicates how much of the business is owned by creditors. Comparing balance sheets over time shows how much the business net worth is growing or decreasing. A balance sheet can be used by the owner of a business to support a request for borrowed funds. Lending agencies use balance sheets to evaluate the financial position of loan applicants.

The balance sheet should also be used to inform the business manager 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 the owner may need to negotiate a long-term loan.

A balance sheet provides information on the financial flexibility of the operation. This indication is referred as liquidity which provides a measure of the farm’s or ranch’s ability to meet the debt obligations as they come due. Comparisons of current assets and current liabilities will indicate if the business is expected to have sufficient cash reserves to meet the forthcoming obligations. Additionally, a comparisons of total current assets to total non-current assets helps determine if too much or too little capital is tied up in permanent investments. A farm business, consisting primarily of non-current assets, has less flexibility than one which has sufficient current assets. Some flexibility in the business should be maintained in order to take advantage of opportunities as they are recognized.
Asset Valuation

One of the more difficult aspects of completing and using the balance sheet is deciding on the value of an asset. There are different methods used to value assets. The two most common are current market value and cost valuation. Market value is the estimated amount the asset would sell for on the date of the statement, less selling costs. Cost valuation of an asset is the original cost or basis of the asset, less any accumulated depreciation. The method used to determine asset value affects financial ratios derived from the balance sheet and the amount of deferred taxes. Most importantly, it affects farm equity. Some balance sheets, like the one shown in the example, have columns for recording both values of an asset.

The National Farm Financial Standards Council recommends that the balance sheet should be prepared on both a market and a cost basis. The cost basis indicates the amount of earned and contributed owner equity. The market value indicates the additional amount of equity that has resulted from the change in asset values due to inflation or deflation. The portion of total equity that has resulted from market value changes is the difference between the market value and cost basis owner equity.

Evaluating the Balance Sheet

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

- Comparing it to balance sheets of the same business in previous years.
- Comparing it to balance sheet data from other farms.
- Using ratios.

Comparison to Previous Years

One of the most effective methods of evaluating the balance sheet is comparing the balance sheet from the current year to previous years’ balance sheets for the same business. Comparing balance sheets over time allows the business owner to examine the changes that have occurred in assets and liabilities and the resulting growth or decline in net worth of the business.

Comparison to Other Farms

Comparing 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.

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2 The Balance Sheet shown in the example is the balance sheet used in the FINPACK financial planning and analysis computer software used by SDSU Extension Economics.
Use of Ratios

Ratios may be used in evaluating balance sheets. A ratio is a comparison of two numbers which are expressed as a numerical ratio of one number to the other or as a percentage of one to the other. Examples of balance sheet ratios are:

\[
\text{Current Ratio} = \frac{\text{Total Current Farm Assets}}{\text{Total Current Farm Liabilities}}
\]

\[
\text{Debt/Asset Ratio} = \frac{\text{Total Farm Liabilities}}{\text{Total Farm Assets}}
\]

\[
\text{Equity/Asset Ratio} = \frac{\text{Total Farm Equity}}{\text{Total Farm Assets}}
\]

\[
\text{Debt/Equity Ratio} = \frac{\text{Total Farm Liabilities}}{\text{Total Farm Equity}}
\]

\[
\text{Working Capital} = \text{Total Current Farm Assets} - \text{Total Current Farm Liabilities}
\]
Valuation Method
- Market Value
- Cost Value
- Both

FINPACK Balance Sheet

<table>
<thead>
<tr>
<th>NAME:</th>
<th>DATE:</th>
</tr>
</thead>
</table>

### CURRENT FARM ASSETS

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
<th>CURRENT FARM LIABILITIES</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and checking balance</td>
<td>(A)</td>
<td>Accrued interest</td>
<td>(sum)</td>
</tr>
<tr>
<td>Prepaid expenses and supplies</td>
<td>(B)</td>
<td>Accounts payable and other accrued expenses</td>
<td></td>
</tr>
<tr>
<td>Growing crops</td>
<td>(C)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>(D)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hedging accounts</td>
<td>(E)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other current assets</td>
<td>(F)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Crops

<table>
<thead>
<tr>
<th>Crop</th>
<th>Quantity</th>
<th>Value</th>
</tr>
</thead>
</table>

#### Crops Under Government Loan

| Schedule | |
|----------||

#### Market Livestock

<table>
<thead>
<tr>
<th>Number</th>
<th>Weight</th>
<th>Value</th>
</tr>
</thead>
</table>

### INTERMEDIATE FARM ASSETS

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
<th>INTERMEDIATE</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breeding Livestock</td>
<td>(A)</td>
<td></td>
<td>(sum)</td>
</tr>
<tr>
<td>Farm Machinery &amp; Equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Titled Vehicles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Intermediate Assets</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Total Intermediate Farm Assets

| Schedule | |
|----------||

### LONG TERM FARM ASSETS

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
<th>LONG TERM</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Land</td>
<td>(A)</td>
<td></td>
<td>(sum)</td>
</tr>
<tr>
<td>Farm Buildings</td>
<td></td>
<td>TOTAL FARM LIABILITIES</td>
<td></td>
</tr>
<tr>
<td>Other Long Term Assets</td>
<td></td>
<td>TOTAL LIABILITIES</td>
<td></td>
</tr>
<tr>
<td>NonFarm Assets</td>
<td>(B)</td>
<td>Retained Earnings / Contributed Capital</td>
<td>(C)</td>
</tr>
<tr>
<td>Total Assets</td>
<td>(D)</td>
<td>NET WORTH</td>
<td>(E)</td>
</tr>
</tbody>
</table>

| Schedule | |
|----------||

I certify that the statements made by me on this balance sheet are true, complete and correct to the best of my knowledge and belief.

Date ______________________ Signature(s) ___________________________
### Schedule A: Cash and Checking

<table>
<thead>
<tr>
<th>Value</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Schedule B: Crops Under Government Loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

- **Total cash and checking**
- **Schedule B: Prepaid Expenses & Supplies**
- **Schedule C: Growing Crops**
- **Schedule D: Accounts Receivable**
- **Schedule E: Hedging Accounts**
- **Schedule F: Other Current Assets**
- **Schedule G: Nonfarm Liabilities**

### Rental And Lease Information

<table>
<thead>
<tr>
<th>Land - Legal Description</th>
<th>Landlord</th>
<th>Total Acres</th>
<th>Crop Acres</th>
<th>Type Of Lease</th>
<th>Annual Cash Rent</th>
<th>Payment Dates</th>
<th>Expiration Date</th>
</tr>
</thead>
</table>

- **Other Items - Description**
<table>
<thead>
<tr>
<th>Owner</th>
<th>Number of Units</th>
<th>Type Of Lease</th>
<th>Annual Payment</th>
<th>Payment Dates</th>
<th>Expiration Date</th>
</tr>
</thead>
</table>
Test Yourself on Using the Balance Sheet for Management Decisions

Indicate whether each of the following statements is true (T) or false (F).

1. The three major components of a balance sheet are assets, liabilities and owner equity.  
   T  F

2. Assets are defined as the amounts that are owed on the balance sheet date.  
   T  F

3. The primary use of a balance sheet is to measure the profitability of a business.  
   T  F

4. The basic accounting equation on which a balance sheet is based states that assets equal liabilities plus owner equity.  
   T  F

5. The recommended categories for assets are current and intermediate.  
   T  F

6. An example of a current asset is farm real estate.  
   T  F

7. An example of a contingent liability is the amount of a loan co-signed for a relative.  
   T  F

8. Never include physical data on a balance sheet.  
   T  F

9. If the assets of a business equal $300,000 and the liabilities equal $100,000, then the owner equity is $400,000.  
   T  F

10. Real estate should be valued on a balance sheet by using only the cost method of asset valuation.  
    T  F

11. A balance sheet is a summary of the assets, liabilities and owner equity of a business over a period of time.  
    T  F

12. An example of a non-current asset is cash.  
    T  F

13. The two methods of valuing assets on a balance sheet are cost and market value.  
    T  F

14. The cost method of valuing assets refers to the original cost of an asset plus capitalized improvements minus accumulated depreciation.  
    T  F

15. The book value of an asset is the value of an asset taken from a book of values for used equipment.  
    T  F

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3 This assessment exercise is taken from Business Management in Agriculture, a video tape based educational program. Business Management in Agriculture was financed and produced by the Cooperative Extension Service, United States Department of Agriculture, Washington D.C., and Farm Credit Bank of St. Paul, Minnesota.
T  F  16. Current liabilities are debts due to be paid on demand or within one year of the balance sheet date.

T  F  17. An example of a current liability is that portion of a term liability due to be paid within 12 months of the balance sheet date.

T  F  18. Deferred tax liabilities should be reported in the main body of a balance sheet.

T  F  19. Personal assets and liabilities should always be included on the balance sheet for a farm or ranch.

T  F  20. A change in the owner equity of a business that uses only the market-value method of valuing assets is due only to earnings.
Test Yourself on Using the Balance Sheet for Management Decisions

Answer Key

Indicate whether each of the following statements is true (T) or false (F).

T  F  1. The three major components of a balance sheet are assets, liabilities and owner equity.

T  F  2. Assets are defined as the amounts that are owed on the balance sheet date.
Comment: False. Assets are defined as all those things that are owned or owed to you on the balance sheet date.

T  F  3. The primary use of a balance sheet is to measure the profitability of a business.
Comment: False. The primary use of a balance sheet is to measure the risk-bearing ability, or financial solvency, of a business.

T  F  4. The basic accounting equation on which a balance sheet is based states that assets equal liabilities plus owner equity.

T  F  5. The recommended categories for assets are current and intermediate.
Comment: False. The categories recommended by the Farm Financial Standards Task Force for assets are current and non-current.

T  F  6. An example of a current asset is farm real estate.
Comment: False. Farm real estate is an example of a non-current asset.

T  F  7. An example of a contingent liability is the amount of a loan co-signed for a relative.

T  F  8. Never include physical data on a balance sheet.
Comment: False. Physical data should always be included on a balance sheet so you can determine whether a change in the value of an asset is caused by a change in the price of the asset or by a change in the quantity. This information can be included in the main body of the statement, in a footnote or reported on a schedule.

T  F  9. If the assets of a business equal $300,000 and liabilities equal $100,000, then the owner equity is $400,000.
Comment: False. Owner equity = assets - liabilities. In this example: $300,000 - $100,000 = $200,000.
10. Real estate should be valued on a balance sheet by using only the cost method of asset valuation.
   Comment: False. Real estate should be valued on a balance sheet using both the cost and market-value methods of asset valuation.

11. A balance sheet is a summary of the assets, liabilities and owner equity of a business over a period of time.
   Comment: False. A balance sheet is a summary of the assets, liabilities and owner equity of a business as of a specific date.

12. An example of a non-current asset is cash.
   Comment: False. Cash is an example of a current asset.

13. The two methods of valuing assets on a balance sheet are cost and market value.

14. The cost method of valuing assets refers to the original cost of an asset plus capitalized improvements minus accumulated depreciation.

15. The book value of an asset is the value of an asset taken from a book of values for used equipment.
   Comment: False. Book value is defined as the cost of the asset plus capitalized improvements minus accumulated depreciation.

16. Current liabilities are debts due to be paid on demand or within one year of the balance sheet date.

17. An example of a current liability is that portion of a term liability due to be paid within 12 months of the balance sheet date.

18. Deferred tax liabilities should be reported in the main body of a balance sheet.

19. Personal assets and liabilities should always be included on the balance sheet for a farm or ranch.
   Comment: False. If a balance sheet is intended to show the financial position of only the business, then personal assets and liabilities should be excluded.

20. A change in owner equity of a business that uses only the market-value method of valuing assets is due only to earnings.
Comment: False. A change in owner equity using the market-value method of valuing assets can be due to earnings or losses and changes in the value of assets.