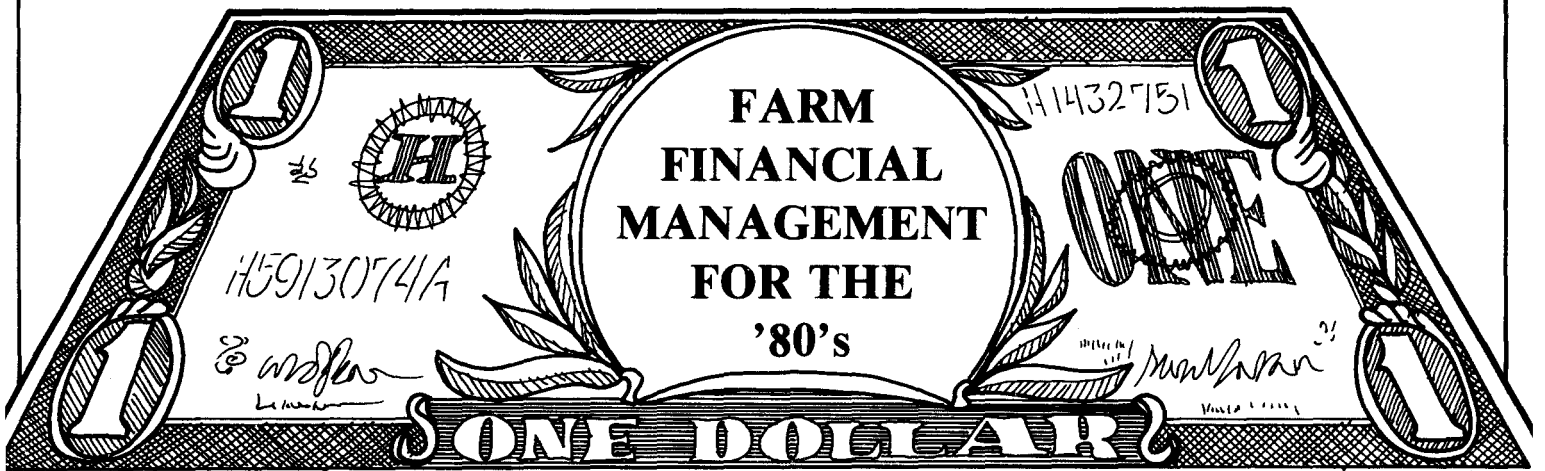




Your Balance Sheet

Most Important Financial Tool

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Contents

Your financial tool kit	1
Balance sheet; your most important financial tool	1
Organization of the balance sheet	1
When to prepare a balance sheet	3
How to prepare a balance sheet	3
Example balance sheet	3
Preparing a balance sheet	5
What the balance sheet shows	13
Using the balance sheet in making decisions	14
Balance sheet analysis	16

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YOUR BALANCE SHEET Most Important Financial Tool

YOUR FINANCIAL TOOL KIT

Managing money is an important part of operating a farm. As this management becomes more important, your financial tools become more valuable.

The three most common financial tools include: the balance sheet; the income statement; and the cash flow sheet.

This circular shows you how to prepare a balance sheet and how to use it in making financial decisions. (Extension Circular 819 describes the income statement and Extension Circular 820 describes the cash flow statement.) A balance sheet is the single most important document you use in financing your farm.

The balance sheet is an essential document when borrowing money, but more important, it can help you determine how much progress you are making on the farm. The balance sheet also can tell you ahead of time when financial problems are likely to occur.

BALANCE SHEET—YOUR MOST IMPORTANT FINANCIAL TOOL

A balance sheet can tell you more about the financial progress of your farm than any other document. It simply balances assets against liabilities to show your net worth.

If a balance sheet is new to you, it's probably because you've heard it called by other names. You may have heard it called financial or net worth statement. All are essentially the same.

A balance sheet is a picture of your business at one point in time. It is like a family picture taken on January 1 each year. By comparing these pictures over time, you can see how your family has grown or changed. Similarly, balance sheets compared over time will show how your business has changed and grown.

A properly prepared balance sheet is your most valuable management tool. Preparing your own balance sheet and doing it at the beginning of your farm business year has the following advantages.

- You will learn about your business and this will help you improve your management.

- Accurate balance sheets are necessary before you can calculate a true income statement for your farm business.

- A properly prepared balance sheet can make it easier for you to borrow more money. It can help you convince your lender that you not only understand your farm business but that you have made financial progress.

- Today many others want information about your business. If you want to lease equipment or get an interest-free machinery loan, financial information is required.

- A balance sheet can give you an idea of your farm's financial pulse and help illustrate how proposed changes in your operation will influence the farm's ability to repay all debts.

Prepare Balance Sheet At Home

In the past, many lenders filled out the financial statement as the farmer sat at the loan officer's desk and recalled the details from memory. The day of this approach will soon be past. More and more lenders are asking farmers to bring a completed balance sheet — just as they ask other businessmen to do.

Your home or office is a better place to prepare a balance sheet than in your lender's office where you have to rely on memory to gather facts about your business. Work on it at home where you have your business records and other files.

You will discover that there is no one right way to prepare a balance sheet but simply better ways of doing it. The first time may be difficult and frustrating, but you'll find it gets easier. You know more about your business than anyone else.

ORGANIZATION OF THE BALANCE SHEET

A balance sheet is a listing of business assets balanced against liabilities or debts. Net worth is obtained by subtracting the liabilities from the assets. Net worth shows the amount of money you have invested in the business while the liability figure shows what your lenders have invested in your business. It tells you where your business is today!

Assets	—What your business is worth
—Liabilities	—What you owe your lender
= Net Worth	—What you own

Balance sheets of most businesses on Main Street generally have two types of assets and liabilities — current and long-term. Farm balance sheets should have three types of assets and liabilities — current, intermediate, and long-term.

Farms have much more land — which does not depreciate — than do other businesses. Land and buildings are usually grouped separately on the farm balance sheet.

Understanding the differences among the three types of assets and liabilities helps greatly both in preparing the balance sheet and in analyzing what it means to you. Understanding the meaning of the figures will help you analyze the financial structure of your business and give you clues as to when the business should be refinanced and when financial problems are about to occur.

ASSETS

Current Assets

Current assets are those that can be sold without affecting the productivity of the farm business. In general, current assets will either be sold or used up within a one-year period.

Current assets include:

- Cash and savings
- Accounts receivable
- Marketable securities
- Stored crops — wheat, sunflower, barley, hay, etc.
- Investment in growing crops
- Supplies — feed, seed, fuel, fertilizer
- Market livestock

Current assets are liquid and can be turned into cash on short notice. Some, such as market livestock, are held because they may not be ready for market. Others, such as crops, may be stored and held for sale at a particular time during the year when prices are more favorable or are to be used as feed.

Intermediate Assets

Intermediate assets are the working assets on the farm. They are the ones used to carry on production activities. They will wear out or lose productive value and must be replaced over a two to 10-year period.

Intermediate assets are not as liquid as current assets. If you sell certain of these assets — machinery or breeding livestock — your ability to produce is reduced. Included are:

- Breeding livestock
- Autos and trucks
- Machinery
- Retirement accounts
- Securities: PCA stock; cash value life insurance; equity in cooperatives.

Long Term Assets

Land and buildings are the main assets with long life. Land is almost unique to a farm business. It often appreciates in value and seldom depreciates.

- Land
- Buildings
- Dwelling
- Long-term contracts
- Stocks — Federal Land Bank

LIABILITIES

Current Liabilities

Current liabilities are those debts that are due within one year. The collateral behind these debts should be the current assets.

Obligations that you have incurred as of the date on the balance sheet and must be paid within 12 months are current liabilities.

- Accounts payable — feed, seed, fuel, fertilizer bills, etc.
- Cash rents
- Lease payments
- Taxes — income, Social Security, and real estate and property (due and accrued)
- Notes — operating loans — personal loans
- Principal payments (due in 12 months) — intermediate and long-term loans
- Accrued interest — current, intermediate, long-term

Intermediate Liabilities

Intermediate liabilities are debts against intermediate assets. Loans on those assets usually are for a two to 10-year period.

- Bank, PCA or FmHA term loans
- Machinery loans, sales contracts (machinery)
- Notes on breeding stock
- Life insurance loans

That portion of the principal due within the next 12 months is considered a current liability.

Long-term Liabilities

Long-term liabilities are loans against long-term assets. Those loans usually run more than 10 years.

- Federal Land Bank loans
- Insurance company loans
- Individual land contracts
- Savings & loan mortgage on dwelling
- FmHA real estate loans

That portion of the principal payment due within one year is considered a current liability.

WHEN TO PREPARE A BALANCE SHEET

Loan Renewal

Traditionally, lenders have prepared the balance sheet for you — usually at loan renewal time. Some lenders prefer to have balance sheets at the time of loan renewal. Their reasoning is that this gives them a better picture of their current collateral position than if the balance sheet was taken at another time of the year.

There are a number of disadvantages in preparing a balance sheet at loan renewal time. First, the balance sheet no longer coincides with the start of your farm record year. Consequently, the balance sheet cannot be used in calculating an income statement. The second drawback is that seldom are loans renewed at exactly the same time each year.

Beginning of the Year

The best time to prepare a balance sheet is at the beginning (or end) of your farm business year. If your business is on a calendar year basis — that is, you start your records January 1 — then the balance sheet should also be prepared as of January 1. If your business year (for accounting purposes) begins March 1, then your balance sheet should be taken as of March 1.

Many lenders today are anxious to get your balance sheet as of your accounting year.

- They know if it is well-prepared, it represents an accurate picture of your business, more so than one taken at loan renewal time by interviewing you in the office.

- They know that with just a little more work it is possible to prepare an income statement.

- By having a balance sheet prepared ahead of time, you'll be able to spend more time during loan renewal on your plans and loan request.

- You can provide the same balance sheet to all persons with whom you deal.

HOW TO PREPARE THE BALANCE SHEET

The first time you prepare your own balance sheet you may find the experience frustrating — not

unusual for anything you do the first time. The second year it will be much easier and become even easier the following year. Following are a few suggestions for preparing your balance sheet.

Use last year's balance sheet.

One of the best ways to complete a balance sheet is to start with a copy of last year's balance sheet. This gives you a place to start and provides a useful checklist on items to include.

Go and count.

You will need to physically go out and estimate the number of bushels on hand or count the number of livestock.

Use your records.

Some information such as cost or depreciation on machines, buildings and land should be available from your records.

Contact lenders.

Organizing information on your debts the first time may be more difficult than you think. You may need to contact your lender to get loan balances and accrued interest. Figures on debts are firm in the sense that they are agreed-upon obligations, but it's sometimes difficult to get current balances. Look for ways to keep an accurate current record of your debts.

EXAMPLE BALANCE SHEET

Bob and Betty Farmer

To analyze the financial position of their farm business, Bob and Betty Farmer assembled the following information about their business.

What Did They Own?

Current assets (normally sold or converted to cash during the year.)

1. First, they balanced their checkbook as of January 1. The cash balance was \$1,855.
2. Bob and Betty also remembered that they had \$2,250 in a passbook savings account.
3. Next, Bob inventoried the livestock held for sale on the farm:
43 calves (averaging 550 lbs.)@ \$313.50/head.

4. Then, Bob checked his grain supplies:
5,000 bu wheat@ $\$3.60/\text{bu}$. (10,000 bu. under loan at $\$3.65$)
50,000 lbs. of sunflower@ $\$.12/\text{pound}$
3,000 bu. barley@ $\$1.75/\text{bu}$.
 $\$6,000$ of alfalfa and hay on hand
 $\$2,000$ of diesel fuel
 $\$3,000$ of supplies for fencing, buildings, etc.
5. Bob also remembered that some of his purchased supplies were in his growing winter wheat crop. He estimated about $\$55$ per acre expense in 100 acres.
6. Checking their records, Bob and Betty discovered that a neighbor still owes them $\$1,250$ for custom baling.

Intermediate term assets (productive assets not normally sold during the year.)

7. Bob's inventory of breeding livestock on the farm January 1:
50 cows@ $\$500/\text{cow}$
2 bulls@ $\$1,500/\text{bull}$
8. The cash value of Bob's life insurance has increased to $\$2,800$.
9. An inventory of machinery and equipment was developed separately as follows.

Item	Date Acquired	Basis Cost	Remaining Book Value	Current Market Value
Ford pickup	1979	$\$7,500$	$\$2,145$	$\$4,500$
JD 4640	1982	$43,000$	$27,090$	$28,810$
Int. combine	1979	$50,000$	$14,286$	$30,000$
Chisel plow	1982	$7,240$	$4,561$	$6,000$
Other machinery & equipment		$101,225$	$32,278$	$63,520$
		$\$208,965$	$\$80,360$	$\$132,830$

Depreciation on machinery and equipment for the past year — $\$30,684$.

Long-term assets (Real estate and improvements)

10. Bob and Betty estimated the total value of their farm land, buildings and improvements as follows:

	Original Cost	Improvement	Current Market
320 acres (1965)	$\$32,000$		$\$151,360$
400 acres (1965)	$\$24,000$	$\$2,500$	$\$42,500$
320 acres (1977)	$\$137,600$		$\$151,360$

Remaining book value of buildings— $\$12,800$
Depreciation on buildings for the past year — $\$3,000$

11. In reviewing their records Bob and Betty have also valued their farm house at $\$20,000$.

What Did They Owe?

Current Liabilities (Debts you are obligated to pay within one year.)

12. During the past year, they continued to use an operating line of credit with the local PCA. $\$15,000$ is still outstanding and will have to be renewed. Accrued interest (if they have to pay off the loan today) is $\$1,500$.
13. Farm Co-op sent Bob a reminder that he has a feed bill of $\$2,500$ and a fuel bill of $\$400$ which are still unpaid from last year. No interest was charged.
14. Bob also remembered that he still owed a neighbor $\$300$ for renting a fall pasture.
15. They also have 10,000 bushels of wheat under a CCC loan at $\$3.65$ per bushel.
16. Real estate taxes levied in the past year and payable after January 1 are $\$1,960$. Bob estimated his federal income and social security taxes to be $\$3,871$ (to be paid by March 1).
17. Bob and Betty skip the principal portion of intermediate-term (I.T.) and long term (L.T.) debt (due in 12 months) until the sections below on I.T. and L.T. liabilities are worked out. They will also need to work out these sections before calculating the accrued interest on I.T. and L.T. liabilities in the current obligations section.

Intermediate-Term Liabilities (Debts due in two to 10 years.)

18. Sorting out their I.T. loans is a chore, but they finally get them organized.

A. John Deere tractor loan with John Deere financing. Balance is $\$24,426$ with principal payment of $\$11,631$ due on November 1. Interest at 10 percent.

B. Car loan at local bank. Balance is $\$3,587$ with principal payment of $\$1,653$ due October 1. Interest at 17 percent.

19. Calculate the principal portion of I.T. liability due in 12 months and enter in the current liabilities section above.
 20. Bob and Betty also calculated the accrued interest due on I.T. loans and entered it in the current liabilities section above.
- | | |
|-------------------------|------------|
| John Deere tractor loan | $\$407^*$ |
| Car loan | <u>152</u> |
| | $\$559$ |

*Calculation

$\$24,426 \times .10 = \$2,442.60$

$\$2,442.60 \div 12 \text{ months} = \203.55

$\$203.55 \times 2 \text{ months (11/1 to 1/1)} = \407.10

Long-Term (L.T.) Liabilities (Debts due in 10 years or more.)

21. Long-term loans on land and buildings were as follows:
- a) 720 acres with Dad Farmer. Balance is \$8,951 with principal payment of \$4,345 due on February 1. (Interest at 6 percent.)
 - b) 320 acres with Uncle Farmer. Balance is \$55,570 with principal payment of \$12,152 due on February 1. (Interest at 9 percent.)
22. Calculate the principal portion of the L.T. liabilities due in 12 months and enter in the current liabilities section above.

23. The accrued interest due on the L.T. loans is calculated and entered in the current liabilities section above.
- | | |
|-------------|---------------|
| Dad Farmer | \$492 |
| Uncle Famer | \$4,584 |
| | <hr/> \$5,076 |

PREPARING A BALANCE SHEET

This is a step-by-step procedure for completing the balance sheet. One of the more critical aspects — particularly with assets — will be establishing values.

CURRENT ASSETS

Cash

There are several ways to obtain a cash balance — but only ONE best way.

Actual Check Balance (the best way)

The most accurate cash figure is the checkbook balance as of January 1 or the date of your balance sheet. Be sure to include all monies deposited and all checks written before the date of the balance sheet.

Bank Statement Balance

The bank statement balance is another possible source of obtaining the cash balance. However, seldom is this an actual cash balance as of balance sheet date because not all checks written prior to that date will have been returned.

Same Cash Balance Figure Each Year (least preferred way)

Traditionally, many balance sheets prepared in cooperation with a lender use the same cash balance figure each year — such as \$500. Over a long period of years, such as five or 10 years, this method may not cause problems. However, when the

farmer makes end-of-the-year purchases or sales for tax purposes, the cash balance can vary greatly from year to year. Most farmers manage their cash in such a way that the checkbook balance is fairly uniform throughout the year. However, because of the selling and buying activities that occur at the end of the year, this balance may actually vary a great deal.

Savings

Savings include the balance in farm savings accounts and certificates of deposit as of the balance sheet date.

Accounts Receivable

Accounts receivable are sales for which you have not received payment or have not deposited the check as of the date of the balance sheet. For example, if you sell hogs on December 30 but you will not receive payment until January, include the amount with accounts receivable. If you have performed custom services for a neighbor but have not received payment, this is also an account receivable.

Marketable Securities

Marketable securities include stocks or bonds that can be easily sold. Publicly-held or publicly-listed securities are considered easily sold. Equity in cooperatives or stocks in privately-held firms that cannot easily be sold are not a current asset. They should be listed under either intermediate or long-range assets.

Hedging Account Equity

If you are using the futures market to hedge grain or livestock and have a margin account with a broker, give the balance in the margin account on the date of the balance sheet.

Commodities for Sale and Feed

List all grain and hay on hand as of the balance sheet date. Under “kind” list the name of the item, such as corn or alfalfa hay. “Number of Units” can be number of tons, cwt., or bushels and the kind of unit. Give the price in the same unit as you report quantity, such as dollars per bushel.

Since current assets are readily marketable, you can price them at their current market value less marketing and transportation costs. For example, if the market price of corn is \$3.25 per bushel, but it costs you 10 cents to get it to market, the balance sheet price should be \$3.15. If you have sold the commodity on a contract, use the contract price less any cost of getting it to market. Likewise, if you have locked in the price of a commodity through a hedging contract, indicate the price at which the commodity has been locked in. If you have contracted or hedged any of the crops, indicate this by a check in the appropriate space. If crops are under CCC loan

you might indicate this by writing in CCC rather than using a check mark.

Investment in Growing Crops

Lenders vary in their attitudes toward putting a value on a growing crop. However, in most cases, it is permissible to report the expenditure made for seed, fertilizer, and chemicals applied to growing crops that have not been harvested. The most common example in North Dakota is winter wheat. It is advisable to record the number of acres planted and cash costs per acre invested in the growing crop.

Seed, Feed, Fertilizer, Chemicals, Fuel

Includes supplies that you have bought for later use. Feed is generally considered to be protein supplement and minerals. Grain is usually entered in crops inventory rather than listed as feed. You will also want to list supplies you have paid for that have not been delivered. Give the total value of these items that you have on hand.

You may also list those items that you have ordered and for which you are obligated to pay. For example, if you list sunflower seed you have ordered as an asset, then you must also list the amount due as a liability under accounts payable.

Livestock Held for Sale

Include steers, barrows, and other livestock being held for sale as slaughter animals. State the kind of animal, the number of head, approximate weight per head, and the value per head. If you state the value per cwt. rather than per head, then also state the quantity in hundredweights. Be sure to indicate the kind of units you are using so that a person reading the balance sheet can tell whether it is head or cwt.

If you have hogs of different weights, list them in separate groups. Group those that are about 40 pounds on one line and include those that may be closer to 120 pounds on another line. This gives a better picture of the animals that you have on hand. You can price the animals at their current market price less trucking or sales charges.

Non-farm

If you have non-farm current assets that you want to include on your farm balance sheet, list the amounts. Include a brief description.

Amounts From Schedule 1

If you need more space to record current assets, use Schedule 1 on the reverse side. Be sure to provide an appropriate breakdown for items recorded. Enter the total of items in Schedule 1 on the front side on the appropriate line.

INTERMEDIATE-TERM ASSETS

Intermediate assets are the productive assets of the farm operation. They are sometimes known as the working assets (the ones that do the work and earn the income).

Breeding Livestock

Separate breeding livestock as much as possible by class, such as cows, heifers, and bulls. Record the number, approximate weight per head, and value per head.

There is disagreement on how breeding livestock should be valued. In either case, realistic values must be used.

1. One method is to use the current market value. This approach, however, can create great fluctuation in the balance sheet from year to year.
2. A second method preferred by many lenders and farm management advisers is to use the same conservative market value each year. For example, a beef cow may be valued at \$400 each year. This approach will slightly over-value animals during the low periods of the price cycle and under-value the livestock during the high part of the cycle. It will, however, maintain more stability on the balance sheet and provide data for a more accurate measure of net farm income.

Autos

Include the year, make, model and value. Trucks could be listed here or could be included in the machinery section.

Machinery and Equipment

From a true accounting standpoint, machinery and equipment should be carried on the balance sheet at book value (cost less depreciation). Book value is used by accountants keeping books for most non-farm businesses. The book value is an important figure to have if you want to calculate a true income on your operation.

A balance sheet should provide as much information about the farm business as possible. Therefore the purchase cost and the depreciation taken to date as well as the current market value should be recorded. Purchase cost and depreciation information can be obtained from your tax schedule.

The preferred value to record on the balance sheet is, of course, the book value. However, farmers usually carry the machinery at an estimated current value. If you prefer to use a current market value, note the book value on your balance sheet. On the other hand, if you use the book value, one sugges-

BALANCE SHEET

NAME Bob & Betty FARMER

ADDRESS Garrison, North Dakota

DATE Jan 1, 1984

CURRENT ASSETS		Assets normally sold or converted to cash during year		CURRENT VALUE
Cash	1855	Savings	2250	4,105
Accts. Receivable				1,250
Marketable Securities				
Hedging Account Equity				
Commodities for Sale & Feed				
Kind	No. units	Unit value	Unit value	Unit value
Wheat	5,000	3.60		18,000
Wheat	(10,000)	3.65	CCC	36,500
Sunflower	50,000	.12		6,000
barley	3,000	1.75		5,250
Investment in Growing Crops	100	AC of wheat @ 55¢		5,500
Feed	6,000	Seed		6,000
Fert.		Chem.		
Fuel	2,000	Other Supplies	3,000	5,000
Livestock Held for Sale				
	No.	Weight	Unit value	
Wintering calves	43	55 cat	57	13,481
Non-farm				
Amounts from Schedule 1				
1. CURRENT ASSETS			SUBTOTAL	10,086
I. T. ASSETS				
Assets not normally sold during the year				
Breeding Livestock				
	No.	Weight	Unit value	
COWS	50		500	25,000
BULLS	2		1,500	3,000
Auto(s) (yr., make, model)				
				1981 Chevy 5,250
Truck(s)				
				1979 Ford 4,500
Machinery Book value:				
				80,360 123,080
Book value:				
Retirement accts.				
Notes rec'bl				
Securities				
Cash value				
life ins.				
				2800 2,800
Non-farm: Non-farm share of auto				
				1,750
Amounts from Schedule 2				
2. INTERMEDIATE TERM ASSETS			SUBTOTAL	16,538
LONG-TERM ASSETS				
Real estate & improvements				
Acres	Year purchased	Orig. cost	Improvement cost since purchase	
320	1965	32,000		151,360
320	1977	137,600		151,360
400	1965	24,000	2,500	42,500
Book value of farm buildings.				12,800
Contract(s) notes rec'bl.				
Non-farm: House				
				29,000
Amounts from Schedule 3				
3. LONG-TERM ASSETS			SUBTOTAL	378,020
TOTAL ASSETS (1 + 2 + 3)				644,486

CURRENT LIABILITIES	Amounts due in 1 year	AMOUNT(S) OWED
	Creditor(s) name	
Feed	FARM CO-OP	2,500
Seed		
Fertilizer		
Chemicals		
Fuel	Farm CO-OP.	400
Repairs		
Other Accounts		
Rent(s)/Lease(s)		300
Estimated & Accrued: Income Tax	1814 Soc. Sec. 2057	3871
R. E. Taxes		1,960
NOTES TO:		
	Date due	
Local PCA	4/15	15,000
CCC Loan (10,000 @ 3.65)		36,500
Principal Portion I.T. Liab. due in 12 mo. (from below)		
		13,284
Principal Portion L.T. Liab. due in 12 mo. (below)		
		16,497
Accrued int. - notes		
		1,500
Accrued int. I.T. \$ 559 L.T. \$ 5076		
		5,635
Non-farm		
Amounts from Schedule 4		
4. CURRENT LIABILITIES		
SUBTOTAL		97,447
I. T. LIABILITIES		
Debts due in more than 1 and less than 10 years (less current amounts)		
PAYABLE TO:		
	Pymt. date	Princ. balance (-) Princ. due in 12 mo.
John Deere	11/1	24,426 11,631 12,795
Local Bank	10/1	3,587 1,653 1,934
Non-farm		
SHOW TOTAL IN CURRENT ABOVE		13,284
Life ins. loans		
Amounts from Schedule 5		
5. INTERMEDIATE TERM LIABILITIES		
SUBTOTAL		14,729
LONG-TERM LIABILITIES		
Debts due in more than 10 yrs. (less current amounts)		
CREDITOR(S) NAME:		
	Pymt. date	Princ. balance (-) Princ. due in 12 mo.
UNCLE Farmer	2/1	55,570 12,152 43,418
Dad Farmer	2/1	8,951 7,345 4,606
Non-farm		
SHOW TOTAL IN CURRENT ABOVE		16,497
Amounts from Schedule 6		
6. LONG-TERM LIABILITIES		
SUBTOTAL		48,024
TOTAL LIABILITIES (4 + 5 + 6)		160,200
NET WORTH (PRIOR YEAR \$)		484,286

BALANCE SHEET SCHEDULE

NAME _____ ADDRESS _____ DATE _____

SCHEDULE 1 CURRENT ASSETS	Assets normally sold or converted to cash during year	CURRENT VALUE
TOTAL SCHEDULE 1		
SCHEDULE 2 INTERMEDIATE-TERM ASSETS	Assets not normally sold during year	
TOTAL SCHEDULE 2		
SCHEDULE 3 LONG-TERM ASSETS	Real estate and improvements	
TOTAL SCHEDULE 3		

SCHEDULE 4 CURRENT LIABILITIES	Amounts due in 1 year	AMOUNT(S) OWED
TOTAL SCHEDULE 4		
SCHEDULE 5 INTERMEDIATE-TERM LIABILITIES	Debt due in more than 1 and less than 10 yrs. (less current amounts)	
TOTAL SCHEDULE 5		
SCHEDULE 6 LONG-TERM LIABILITIES	Debts due in more than 10 years (less current amounts)	
TOTAL SCHEDULE 6		

BALANCE SHEET

NAME _____ ADDRESS _____ DATE _____

CURRENT ASSETS	Assets normally sold or converted to cash during year	CURRENT VALUE
Cash	Savings	
Accts. Receivable		
Marketable Securities		
Hedging Account Equity		
Commodities for Sale & Feed		
Kind	No. units Unit value	✓if under contract
Investment in Growing Crops		
Feed	Seed	
Fert.	Chem.	
Fuel	Other Supplies	
Livestock Held for Sale		
	No. Weight	Unit value
Non-farm		
Amounts from Schedule 1		
1. CURRENT ASSETS		SUBTOTAL
I. T. ASSETS Assets not normally sold during the year		
Breeding Livestock	No. Weight	Unit value
Auto(s) (yr., make, model)		
Truck(s)		
Machinery Book value:		
Book value:		
Retirement accts.	Notes rec'bl	
Securities	Cash value	
	life ins.	
Non-farm		
Amounts from Schedule 2		
2. INTERMEDIATE TERM ASSETS		SUBTOTAL
LONG-TERM ASSETS Real estate & improvements		
Acres	Year purchased	Orig. cost Improvement cost since purchase
Contract(s) notes rec'bl.		
Non-farm		
Amounts from Schedule 3		
3. LONG-TERM ASSETS		SUBTOTAL
TOTAL ASSETS (1 + 2 + 3)		

CURRENT LIABILITIES	Amounts due in 1 year	AMOUNT(S) OWED
	Creditor(s) name	
Feed		
Seed		
Fertilizer		
Chemicals		
Fuel		
Repairs		
Other Accounts		
Rent(s)/Lease(s)		
Estimated & Accrued:		
Income Tax	Soc. Sec.	
R. E. Taxes		
NOTES TO:		
	Date due	
Principal Portion I.T. Liab. due in 12 mo. (from below)		
Principal Portion L.T. Liab. due in 12 mo.		
Accrued int. - notes		
Accrued int. I.T. \$	L.T. \$	
Non-farm		
Amounts from Schedule 4		
4. CURRENT LIABILITIES		SUBTOTAL
I. T. LIABILITIES Debts due in more than 1 and less than 10 years (less current amounts)		
PAYABLE TO:	Pymt. date	Princ. balance (-) Princ. due in 12 mo. =
Non-farm		
SHOW TOTAL IN CURRENT ABOVE		
Life ins. loans		
Amounts from Schedule 5		
5. INTERMEDIATE TERM LIABILITIES		SUBTOTAL
LONG-TERM LIABILITIES Debts due in more than 10 yrs. (less current amounts)		
CREDITOR(S) NAME: Pymt. date Princ. balance (-) Princ. due in 12 mo. =		
Non-farm		
SHOW TOTAL IN CURRENT ABOVE		
Amounts from Schedule 6		
6. LONG-TERM LIABILITIES		SUBTOTAL
TOTAL LIABILITIES (4 + 5 + 6)		
NET WORTH (PRIOR YEAR \$)

tion is to record the current market value of machinery and equipment in the left margin.

Your lender may want a more detailed listing of the machinery on hand. You may want to visit with him concerning the acceptability of your tax depreciation schedule or make other arrangements.

Retirement Accounts

If you have an established account, record the current value of that account.

Notes Receivable

If you have loaned money to other people, state the value of loans outstanding.

Securities

Securities include investments in small corporations or businesses that may not be trading on the stock exchange — PCA stocks and equities in cooperatives.

Non-farm

If you have non-farm assets that you want to include on the farm balance sheet, record them. Be sure to note the nature of these assets.

Amounts From Schedule 2

If you need additional space for recording intermediate-term assets, use schedule 2 on the reverse side of the balance sheet and bring the total to the appropriate line on the front side.

LONG-TERM ASSETS

Land and Buildings

The major long-term assets are land, buildings and improvements. Improvements could include terraces, land clearing, lakes, water supply, etc. List each parcel of land — include the number of acres, year purchased, and the amount you paid for the land including improvements. If you have made improvements or additions to buildings, terraces, waterways, etc., include the cost of these improvements. Show the amount of depreciation on the buildings taken to date. This information should be available from your tax records. Subtracting depreciation from total cost gives you the book value of your property.

What value should be used on land and buildings?

1. One method is to use the book value discussed. This is the preferred method from an accounting standpoint.

2. Conventionally current value is reported. How you wish to handle it depends on your lender. A compromise is to record the book value in the value column and the current market value in the left-hand margin. (You can do it the other way around). It is important that it is clear on the balance sheet how you arrived at values.

3. A third approach is to use a conservative market value and update this value periodically, such as every four or five years. In this way, it is possible to analyze the business without bringing inflation into the analysis.

If you have owned land for a considerable period of time, the book value may be difficult to establish. However, it is to your benefit (or to the benefit of your heirs) to establish the book value and record it. There will be a time when you or your heirs will need this information. Documenting this information could save you taxes in later years in addition to providing you with valuable information for your balance sheet.

Contract(s)/Note(s) Receivable

A number of items can be recorded. Be sure to include your stock from Federal Land Bank loans. Also, record any long-term loans that you made to others.

Non-Farm

You have the opportunity, if you desire, to record long-term non-farm assets. This could be the value of the residence if not included in the farm value. It could also be a house or a business in town. Provide a brief description of the type of assets to be included. If you record the total value of non-farm assets, be sure to include the liabilities on these assets in the non-farm liability section.

Amounts From Schedule 3

If the amount of space to record long-term assets is insufficient, use schedule 3 on the reverse side of the balance sheet. Bring the total to the front side.

Total Assets

Now, total the value of assets in each section. Then add the current, intermediate, and long-term totals to get total assets. This is the value of assets you own.

CURRENT LIABILITIES

Debts you are obligated to pay within one year are current liabilities. A number of items will take some thought to clarify in your mind. Ask yourself this question: "If I were to quit farming today and sell out, what debts must I pay today and in what amount?"

Feed, Seed, Fertilizer, Chemicals, Fuel, Repairs and Other Accounts

Bills for supplies you have purchased but have not paid are accounts payable. In some cases the supplies may still be on hand but in other cases you may already have used them. Anything you have recorded as an asset or have already used but not paid for should be listed under amounts owed.

Rent(s)/Lease(s)

Include lease payments you are obligated to make during the coming year. This is particularly true for items such as irrigation equipment or tractor leases. Record only the amount of these payments due the coming year.

Land rents are usually not recorded as a liability unless they are past due. If rent payments are due in March and October, however, it may be well to record the March payments. An important issue in recording land rent is to take into account the nature of the lease obligation and to be consistent from year to year.

Estimated and Accrued Income Tax

Include the amount of income tax and Social Security due on the past year's income. The accurate amount will likely not be known at the time the balance sheet is prepared; use a reasonable estimate.

Real Estate Taxes

Record property taxes that are due and payable. On balance sheets being prepared at the first of the year no taxes are due — if the taxes were paid on them in December. However, if the taxes have not been paid, record the amount due. Also, if the balance sheet is prepared at some other time during the year, consider the proportion of taxes due at that time.

Notes

Record loans due within the next year. This should include operating loans from banks, PCA, and FmHA. Also include loans from individuals and relatives that are of a short-term nature. Record the amount of principal owed.

Principal Portion of I.T. Liabilities and Principal Portion L.T. Liabilities (due in 12 months).

Before trying to complete this section, fill out the intermediate and long-term liabilities section. In doing so you will compute the figures for this section.

At first this item seems confusing. However, consider for a moment how much principal is due in the next 12 months on a long-term loan and an intermediate-term loan. Do not include the interest portion. On amortized loans this may be somewhat difficult to estimate. Your lender should give you a reasonable estimate.

Accrued Interest

If you were to pay off your loans today, how much interest would be due? For those loans on which you have recently made a principal payment, the interest due will be fairly small. On the other hand, for those loans on which payments will be due in the next few months, the accrued interest could be sizeable. Estimate the amount of interest due and record this by type of loan.

Non-farm

If you have non-farm obligations of a short-term nature, record them here.

Amounts From Schedule 4

If you do not have enough room to record your short-term obligations on the front, enter the remaining ones in schedule 4 on the back and record the total on the front side.

INTERMEDIATE-TERM LIABILITIES

Debts due in two to 10 years are intermediate liabilities. Basically they are notes and debts on breeding livestock and machinery. With the current practice of many lenders writing short-term notes on machinery to take advantage of interest rate fluctuation, it may be difficult to sort out intermediate term from short-term liabilities. However, if you have a loan on machinery and only a portion of the principal is expected to be paid within the next 12 months, record the amount due this year under current liabilities and the remainder as intermediate-term liabilities.

Term Loans

State to whom the loan is payable — whether it is a bank, PCA, FmHA, a machinery company, or an individual. Record the payment dates. If more than one payment is due, record both dates.

(a) **Principal balance.** Record total principal due under the heading Principal Balance.

(b) **Principal due.** Under Principal Due in 12 Months record the payment that must be made during the next year. This should be the amount that will be recorded in the current liabilities section under the "Principal Portion of I.T. Liabilities Due in 12 Months." Subtract the principal due in 12 months

from the principal balance to get the amount owed. The amount owed, as recorded under intermediate loans, consequently will be the amount due beyond this year. Be sure to record the non-farm liabilities on those items that you have also recorded as non-farm assets in the intermediate section.

Life Insurance Loans

Be sure to include any loans against your cash value life insurance policies.

Amounts For Schedule 5

If you need more space to record all of the liabilities, record them in schedule 5 on the back of the balance sheet and enter the total on the front side.

LONG-TERM LIABILITIES

Debts on buildings and land (or other loans of more than 10 years) are long-term liabilities.

Record the name of the creditor and the month that payment is due. If more than one payment is due, record the total principal balance due and the amount of the principal (excluding interest) due in 12 months. Subtract the Principal Due in 12 Months from the Principal Balance and record that as the amount owed.

The total of the Principal Due in 12 Months should be recorded in the current section on Principal Portion Due in 12 Months.

Amounts From Schedule 6

If you have insufficient room to record all information here, record the remaining loans on the reverse side under schedule 6 and bring the sub-total forward.

Total Liabilities

After recording the liabilities add each section to get current, intermediate, and long-term liabilities. Add the three sub-totals to obtain total liability and record the total.

Net Worth

Subtract total liabilities from total assets to arrive at your net worth.

WHAT THE BALANCE SHEET SHOWS

Net Worth

$$\begin{array}{r} \text{Assets} \\ - \text{Liabilities} \\ \hline = \text{Net Worth} \end{array}$$

Your net worth is the investment or equity you have in your business. An important question to ask, however, is, "If I were to sell out would I really end up with this amount of money?" The answer depends on how you have valued your assets and the actual sale price. But for the moment let's assume you sold the assets at value listed on the balance sheet. If you were to sell your current assets, all income would be taxed as regular income.

What about the intermediate-term assets? All sales of farm-raised breeding livestock would be taxed as capital gains. If you have recorded the book value on machinery, no tax would be due if sold for book value. Any sales value above the book value, however, would require regular income tax be paid on the gain. The same is true of long-term assets sold.

Your net worth figure is not as firm a figure as you might expect. It is likely that the government owns a part of your net worth and will collect at the time you sell the assets.

Working Capital

$$\begin{array}{r} \text{Current Assets} \\ - \text{Current Liabilities} \\ \hline = \text{Net Working Capital} \end{array}$$

One of the more useful figures that you can compute is net working capital. Current liabilities are due within 12 months. One way to pay them off would be to sell all the current assets. The amount of working capital is the difference between the current assets and the current liabilities. Those operations with a good working capital position — current assets are considerably higher than current liabilities — have a great deal of cushion to weather adversity. They have a greater ability to handle drought or a serious turn of events. A good working capital position puts you in a better position to make investments. Working capital makes it easier to borrow money and puts you in a more liquid position.

To properly interpret this working capital position, however, be sure that short-term notes are actually against short-term assets and not against intermediate-term or long-term assets. Frequently, farmers and lenders will finance machinery on short-term notes. These notes may be rolled over from year to year but doing so does not give a good picture for the balance sheet.

How Do You Get More Working Capital?

One way to increase working capital is to reduce current liabilities. A traditional way has been to refinance long-term assets — borrow money on land to pay off short-term debt. This is one of the easiest and one of the most practical ways, but it can also raise interest rates if the long-term loans are fixed at low rates. The important point is to recognize that farm businesses in good working-capital positions find it much easier to borrow money than those in poor working-capital positions.

Percent Equity In The Business

Another very useful figure is the percent equity you have in the farm business. To obtain this figure, divide net worth by the total assets and multiply by 100. This tells you the percentage of the assets that you own. This percentage figure depends, to a large extent, on how you have valued your intermediate and long-term assets.

Net Worth ÷ Assets × 100 = Percent Equity

Guidelines and standards are established for many commercial businesses to assign book values to assets. A standard by which a certain percent equity in a farm business is judged good or bad is difficult to develop. The variability among farms in the value placed on intermediate and long-term assets is too great. Therefore, greater skill is required to analyze a farm business compared with many non-farm businesses.

Leverage Ratio

A figure similar to percent equity is the leverage ratio. Divide the liabilities by net worth to obtain the leverage ratio.

$$\text{Leverage Ratio} = \frac{\text{Liabilities}}{\text{Net Worth}}$$

Leverage ratio tells you how many dollars your lenders have “invested” for each dollar you have invested.

USING THE BALANCE SHEET IN MAKING DECISIONS

Balance sheets can be a valuable tool in making investment and financial decisions. They can tell you ahead of time the kinds of problems that can result from some of these decisions.

The key to using a balance sheet in analyzing new investments is to look at the balance sheet before and after an investment is made.

First, let's consider ways that assets and liabilities can change on a balance sheet.

Assets Increase

- Inflation (increase in value or price)
- Gifts (an inheritance of cash or land)
- Growth (raised livestock, stored crops)
- Purchases* (land, machinery, supplies)

*Total assets increase only if money is borrowed to buy the asset — such as a tractor. If cash in the bank is used, then assets have been converted from cash to machinery.

Assets Decrease

- Deflation (stored crops decrease in price)
- Depreciation (machinery wears out)
- Sales* (land, machinery)

*Sales decrease assets only if money is used to pay off debt. If put in cash, then only the form is changed.

Liabilities Increase

There is only one way to increase liabilities — borrow or buy on credit.

Liabilities Decrease

There is only one way to reduce debts — use cash to pay off the debt.

Net Worth

Two basic ways to increase net worth are:

Growth. (increase assets, crops, livestock, cash, etc., from earnings). NOTE: You have to be an active farmer to get this kind of net worth increase.

Inflation. In recent years inflation in land and machinery has increased the net worth of farms. NOTE: You don't have to farm to get this type of net worth growth.

Leverage Ratio

Let's take a simple example to see how to use the balance sheet leverage ratio in decision making. Example: Assume that Bob Farmer has the following financial statement:

Assets	\$200,000
<u>Liabilities</u>	<u>100,000</u>
Net Worth	\$100,000

He is considering buying two pieces of land, each priced at \$100,000. For simplicity, let's say he borrows the entire amount — or refinances current land to pay for the added purchase. What is the effect on his balance sheet?

	Present	Purchases	
		\$100,000	\$200,000
Assets	\$200,000	\$300,000	\$400,000
Liabilities	100,000	200,000	300,000
Net Worth	\$100,000	\$100,000	\$100,000
Liabilities	\$100,000	\$200,000	\$300,000
Net Worth	\$100,000	\$100,000	\$100,000
Leverage ratio	1:1	2:1	3:1

Now let's consider:

Net Worth. Regardless of the amount purchased, Bob's net worth did not change. As he bought land, he added to both assets and liabilities.

Leverage Ratio. His starting ratio was not outstanding. He and his lender each owned half of the business. As he added land his lenders increased their share in the business. There is little question that as this ratio increases his lenders become more concerned — not only because they "own" a greater portion, but also about Bob's ability to pay off the debt.

Working Capital. Working capital can be important to watch. It affects the feasibility of an investment.

Let's say Bob Farmer is required to make a 20 percent down payment on the land and he can't refinance the existing land to make the down payment. Bob decides he has some stored crops on hand that he can sell to get cash.

Buy		\$100,000	\$200,000
Borrow		80,000	160,000
Sell current assets		20,000	40,000
Assets			
Current	\$50,000	\$30,000	\$10,000
Intermediate	50,000	50,000	50,000
Long term	100,000	200,000	300,000
Total	\$200,000	\$280,000	\$360,000
Liabilities			
Current	\$30,000	\$30,000	\$30,000
Intermediate	30,000	30,000	30,000
Long term	40,000	120,000	200,000
Total	\$100,000	\$180,000	\$260,000
Net Worth	\$100,000	\$100,000	\$100,000
Working capital	20,000	0	-20,000
Liabilities	100,000	180,000	260,000
Net Worth	\$100,000	\$100,000	\$100,000
Leverage Ratio	1:1	1.8:1	2.6:1

The above example shows why a good working capital position is important. Bob might be able to swing the purchase of one parcel — if he has a generous banker. But with no working capital he's in trouble if anything goes wrong.

With purchase of two parcels he's in trouble. He may have sold mortgaged property. His current assets are not able to cover short-term debt. Even with his intermediate debt and current assets he can barely cover short-term and intermediate debt.

Any way you look at it, he's headed for trouble.

Profitability

A balance sheet does not show if an operation is profitable or if making an additional investment is profitable. Comparing several balance sheets over time can, however, show growth in assets. Growth is not possible without making a profit.

However, it is possible to tell from a balance sheet the kind of earnings that are necessary to make payments on the debt. Making projections based on purchases can give some idea regarding the feasibility of repaying new debt.

Let's again take our previous example to show how this can be done. Business assets should be productive and generate income. The earning rate of assets is usually stated as certain percentage of all assets. However, if there is debt against the assets we need to pay annual interest on the debt.

	Present	Purchase	
		\$100,000	\$200,000
Assets	\$200,000	\$300,000	\$400,000
Liabilities	100,000	200,000	300,000
Net worth	\$100,000	\$100,000	\$100,000
Case I			
Earnings 10%	\$20,000	\$30,000	\$40,000
Interest 15%	15,000	30,000	45,000
	\$ + 5,000	\$ 0	\$-5,000
Case II			
Earnings 10%	\$20,000	\$30,000	\$40,000
Interest 8%	8,000	16,000	24,000
	\$12,000	\$14,000	\$16,000

Leverage pays when the earning rate on assets is higher than the interest rate. This is shown clearly in Case II. We saw this situation in certain parts of the 1970s. In this situation the more assets one owns the more profitable the operation, regardless of the leverage ratio or amount of debt.

When farm profitability turns to the relationship shown in Case 1, then high leverage can cause

serious financial problems — not only profitability problems but, more important, repayment problems. Debt must be paid from profits.

Deciding how much debt to carry is an important question and the answer is not the same for everyone. Some producers will find earnings increase faster by becoming a more efficient producer rather than increasing in size of operation. This is especially true when the earning and interest ratios are as shown in Case I. When interest rates are lower than the rate of earnings, that's the time to expand the size of an operation.

BALANCE SHEET ANALYSIS

Several of the financial ratios which have been discussed can be obtained from the balance sheet. Although not every lender would agree as to what these ratios ought to be, the following table will provide some guidelines.

		Financial Condition		
		Strong or favorable	Satisfactory or weak	Weak or unfavorable
Ratios				
1. <u>Net worth</u> Total assets	= ownership equity	.6 or more	.4-.6	less than .4
2. <u>Current assets</u> Current li- abilities	= current ratio	2.3 or more	1.6-2.3	less than 1.6
3. <u>Total liabilities</u> Net worth	= leverage ratio	less than .67	.67-1.5	more than 1.5

These ratios can change from the beginning of the year to the end of the year and will change over time. Progress will be made as the ratios move from weak to satisfactory to strong. Should there be a trend in the opposite direction, steps must be taken to avoid any further deterioration in the financial condition and to try to strengthen the financial position.

COMMENTS

Your balance sheet can be a valuable financial tool. It tells you how your farm business looks today — just like a photograph. Balance sheets can tell you how your business has changed over time. A balance sheet can also be a valuable tool in examining how a large investment such as a land purchase can affect the financial health of the business.

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