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Balance Sheet

Agricultural Business Management

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A complete set of financial statements for agriculture include: a Balance Sheet, an Income Statement, a Statement of Owner Equity and a Statement of Cash Flows. The FINPACK software, developed by the Center for Farm Financial Management, University of Minnesota, generates each of these statements. Other software and paper products generate similar information. Key ratios and measurements covering Liquidity, Solvency, Profitability, Repayment Capacity and Efficiency have become standards in the agricultural industry and are generated from these financial statements.

A "Balance Sheet" lists Assets, Liabilities and Net Worth as of a certain date. It can be thought of as a "snapshot" of your financial condition at that time. For producers whose fiscal year coincides with the calendar year, January 1 is an excellent date for the annual Balance Sheet. It marks the beginning and ending of their business year, and enables the completion of a good accrual adjusted Income Statement. Producers, who have a fiscal year different than the calendar year, should complete their annual Balance Sheet at the beginning of their fiscal year.

An excellent Balance Sheet can be prepared using the FINPACK software. This discussion will focus on that Balance Sheet. Other good Balance Sheets are structured in a similar way. The Assets are shown on the left side of the page, and the Liabilities are shown on the right. The Net Worth appears on the bottom right hand side of the page. When you add the Liabilities plus the Net Worth, they will equal the total of the Assets. That is where the term "balance" sheet comes from. One side balances with the other. Page one of the FINPACK Balance Sheet is the actual Balance Sheet. The additional pages are meant to be helpful, and have schedules that elaborate on various parts of the Balance Sheet.

Assets are items that are owned and have value. They belong on the Balance Sheet whether these items are paid for or whether there is debt against them. The FINPACK Balance Sheet has horizontal lines dividing the Assets between "Current Farm Assets", "Intermediate Farm Assets" and "Long-Term Farm Assets", followed by "Total Farm Assets" (the total of the above), then "Non-Farm Assets", and then "Total Assets" (the total of all farm plus non-farm assets).

"Current Assets" are those assets that will likely be converted into cash within a year. Besides cash, other examples of "Current Assets" are: supplies; accounts receivable; grain and feed that will be marketed directly or through livestock; and market livestock that is held for the purpose of growing, finishing and selling.

"Intermediate-Term Assets" have a longer life in the operation (usually up to 10 years). Although they can be sold, that is not the specific purpose for owning them. Examples are: breeding stock, machinery, etc.

"Long-Term Assets" have a long life (usually greater than 10 years). Land, buildings, etc. are classic examples.

The FINPACK Balance Sheet has vertical columns in the Intermediate and Long-Term Assets groups marked "Cost Value" and "Market Value". These are different methods of valuing the same assets. The "Cost Value" is the un-depreciated value of the assets (original cost, less depreciation that has been taken over time). The "Market Value" is the value that you could reasonably sell the assets for. The "Current Assets" have only one "Value" (Market Value). Some Balance Sheets use only one valuation method. The accounting world typically uses only the "Cost Value" method. Other Balance Sheets use only the "Market Value" method. The FINPACK Balance Sheet includes both valuation methods. By having both methods, it is possible to calculate a good estimate of the "Deferred Tax Liabilities" and it gives further meaning to your "Net Worth".

In a completed Balance Sheet, the amount of Total Assets in the "Cost Value" column is usually different than the amount shown in the "Market Value" column.

Each is meaningful in its own way. The "Cost Value" total has no inflation in it, and has depreciation working against it. The "Market Value" total is not affected by depreciation, and may have significant inflation built into it. An examination of individual assets that you own may show differences as dramatic as: the "Cost Value" of a tractor that you have owned for 20 years may be "zero", but the "Market Value" may be $20,000. A bare 80 acres that you bought for $600 per acre years ago could have a "Cost Value" of $48,000 and a "Market Value" of possibly $460,000.

The right side of the Balance Sheet lists the Liabilities. These are obligations owed to others. The FINPACK Balance Sheet divides the Liabilities into groups much as was done on the assets side. The "Current Liabilities" are those obligations that are due and payable within one year. They include: interest that has accrued as of the date of the Balance Sheet; accounts payable that are owed to others, short-term operating and feeder loans, and the principal portion of the longer term debt that will be due within the year.

The "Intermediate-Term Liabilities" and the "Long-Term Liabilities" are obligations that are due over time. There is no exact time division between "Intermediate-Term Loans" versus "Long-Term Loans" but as a rule, the "Intermediate-Term Loans" are due over the next 10 or fewer years and those longer than 10 years are considered "Long-Term". Equipment loans or some facility loans are good examples of "Intermediate-Term Loans". The classic "Long-Term Loan" is the land loan. The FINPACK Balance Sheet shows the "Principal Balance" (amount owed), the "Principal Due" (that portion of the total principal that is due within one year which has already been moved up to the "Current Liabilities" category), and then the "Intermediate" or "Long-Term Balance" (portion of the loan that is due beyond this next year).

If one's assets were sold for the market value listed, there would likely be an income tax liability generated by the sale. The "Deferred Liabilities" calculated on the FINPACK Balance Sheet is an estimate of that tax liability. The Deferred Liabilities are calculated by multiplying a tax rate by the difference between the sale price ("Market Value" of the asset) and the tax basis ("Cost Value" of the asset). If the Deferred Tax Liability is not included on the Balance Sheet, the Net Worth is overstated.

As the liabilities are totaled on the Balance Sheet, the sum of the "Cost" column is different than the sum of the "Market" column. The "Cost" column equals the Total Farm Liabilities, plus Non-Farm Liabilities. The "Market" column total includes the Total Farm and Non-Farm Liabilities, plus the Deferred Liabilities.

Net Worth is calculated by subtracting the Liabilities from the Assets. Since the FINPACK Balance Sheet has two columns of assets, and two columns of liabilities, there are two components of the Net Worth, the "Retained Earnings/Contributed Capital" and the "Market Valuation Equity". The Total Liabilities in the "Cost" column is subtracted from the Total Assets in the "Cost Value" column to calculate "Retained Earnings/Contributed Capital". The "Cost Value" portion of the Net Worth was earned. The Assets are shown at their depreciated values. No inflation is included. In the case of an entity (partnership or corporation), the "Retained Earnings/Contributed Capital" includes the capital that was contributed to the entity. In every case, it also represents the retained earnings over the years. The Total Liabilities of the "Market" column is subtracted from the Total Assets in the "Market Value" column to calculate the "Net Worth". This "Net Worth" is made up of two parts: the "Retained Earnings/Contributed Capital" (explained above) plus the "Market Valuation Equity" (the change in market value net worth due to market value changes that have nothing to do with farm earnings). By studying the two components of the "Net Worth", one can identify the portion generated by earned capital (Retained Earnings/Contributed Capital), and the effects of inflation, inheritance, etc. (Market Valuation Equity).

A Balance Sheet by itself does not show you whether you are making money or losing money. It does not show you where you have come from or where you are going. However, by comparing several Balance Sheets completed over time, significant trends can be identified. Your Balance Sheet can be analyzed using standard accepted ratios and measurements. By understanding your Balance Sheet and the key "Liquidity" and "Solvency" ratios and measurements, you can identify strengths and weaknesses in your financial life. *See Financial Management Series #5- Ratios and Measurements.*

It is important for the farmer to have good financial statements and analysis, and to understand them. After all, it is their financial life.

Caution: This publication is offered as educational information. It does not offer legal advice. If you have questions on this information, contact an attorney.