

# Farm MANAGEment Minute

*A monthly newsletter from the Department of Agricultural and Resource Economics*

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## Introduction

Welcome to another issue of Farm MANAGEment Minute. We hope you enjoyed the inaugural issue and look forward to discussing more farm management topics in this second issue.

In this issue:

- Importance of balance sheets in farm financial analysis
- Investment decision-making
- Farm bill debate continues
- Concluding thoughts

## Importance of maintaining two balance sheets

While much has been written on the importance of maintaining two balance sheets, it is always helpful to have a short refresher. It is especially relevant when land and equipment values change rapidly from year to year and high profits can greatly influence net worth accumulation. Cost and market-based balance sheets and their importance on net worth analysis are covered in this brief article.

A balance sheet provides a view of a farm's financial position on a specific date. It is a listing of everything owned and owed by the farm business on that day. The balance sheet shows the farm's liquidity and solvency positions. Cost-basis balance sheets value intermediate and long-term assets at the initial cost of assets, plus any improvements and minus depreciation to arrive at asset values. The cost-based balance sheet is important for providing information on how net worth is created from capital investments in the farm business. It creates an accurate assessment of

how a farm business has created wealth using capital assets. Using this information over time can show how net worth increased due to the farm's efficient use of assets in building up the business.

A market-based balance sheet values intermediate and long-term assets at their current market values. Market values are essentially the liquidation values of the assets. There are advantages to using this type of balance sheet because it is useful to show what a farm business would be worth if everything were sold on a specific day. This information is often useful when valuing assets as collateral for a loan or for estate planning. Market-based values of intermediate or long-term assets can increase or decrease significantly from one year to the next, as was seen with housing values in the first decade of the 2000s, and is being seen with farmland prices today. It is important to have a clear understanding of the market and what the asset might be worth in an auction or

if the asset were sold when listing the market value on a balance sheet. Maintaining accurate land and machinery values is difficult when the values seem to change with no formulaic reasoning. Nonetheless, the balance sheet is still useful to determine a farm's financial position and its ability to pay debts and build wealth.

The cost-basis balance sheet allows us to calculate changes in retained earnings, which build net worth for the farm, based on changes from net income rather than from changes in asset valuation as in a market-based balance sheet. Net worth is reflected in the changes in asset values for breeding livestock, machinery, equipment, buildings, and land, along with their associated liabilities. A market-basis balance sheet reports changes in net worth by adding capital gains (losses) to retained earnings, thus reflecting changes in assets' market values and their impact on net worth.

One problem with asset valuation on a balance sheet is how to value raised breeding livestock. One method recommended by the Farm Financial Standards Council (FFSC) is to accumulate all costs of production required to raise the animal up to the age at which it is put into use. Then the total accumulated production cost can be used as the "purchase price" for the asset's valuation purposes and the total expense becomes the beginning depreciable value. This allows the expense of the animal to be allocated across its years of use rather than during the

time when it is growing. This method requires substantial record keeping, and may not fit into many producers' operations since raising breeding livestock is likely not an enterprise of its own. An alternative method is to use a fixed base value for breeding livestock of a certain age as the starting value on the balance sheet. This should reflect the approximate cost of raising the animal to its productive age. This value should then remain fixed over time so that breeding livestock asset values only change when the number of animals changes. It is important to consider both methods to value breeding livestock depending on specific needs and abilities of the farm and farm manager.

Both cost- and market-basis balance sheets are necessary to analyze a farm's change in net worth from profits as well as its ability to get and repay debt. However, due to the differences in net worth analysis between the two, it is important to keep both for adequate reporting and for overall financial health analysis. With high profits in recent years, it

The MANAGE program is designed to help farm families get what they want out of life. Performing in-depth financial analysis including two balance sheets can help farmers achieve their goals. Anyone interested in analyzing their farming operation's financial health can call the MANAGE helpline at 1-800-354-0561 to arrange a meeting with a farm management specialist.

## Investment decision-making

High farm profitability in the last few years may encourage farmers to purchase new land, equipment, buildings, or install irrigation systems because it seems especially easy to recover the investment cost. However, it is still important to perform a financial analysis of the

investment decision, especially if debt financing is used to purchase the asset. Capital investment analysis includes analyzing the payback period, net present value, return on investment, and internal rate of return. It is important to consider the long-term returns of

any capital investment to understand its contribution to profitability and net worth accumulation. In addition, it is important to figure income tax implications from making any new investment. Section 179 expensing options and depreciation expense will have important implications on the amount of taxes paid by the farm business and can impact the likelihood of a new asset paying adequate returns.

It is also important to consider leasing before making capital purchases. Leasing provides benefits because no down payment is required, in most cases, and the entire lease payment can be written off taxes as an operating expense. Disadvantages include the possibility of restrictions on the number of hours a farmer can put on leased equipment. Leasing equipment or land does not increase a farm's asset base since it is not owned, so it might not contribute to net worth accumulation depending on overall farm profitability.

Always consider alternative scenarios before investing in new assets. While it is important to consider alternative investments and financing options, it is also important to perform "what-if" scenarios. For example, when evaluating investment choices, it may make sense to evaluate alternative down payments as well as a variety of financing terms to determine how the business's cash flow will be affected. In addition, it is useful to evaluate the asset's

ability to generate revenue under different scenarios. Purchasing a new irrigation system may make sense when crop prices are high and yield potential increases dramatically, but if crop prices fall significantly or yields fail to increase significantly, the system may not have the ability to pay for itself in a reasonable amount of time.

Existing farm debt must be considered when making capital investments. A recent publication by Jason Henderson and Nathan Kaufman of the Omaha Branch of the Federal Reserve Bank of Kansas City indicates that farmers often use wealth to make capital purchases even when farm income declines (<http://kansascityfed.org/publicat/econrev/pdf/13q2Henderson.pdf>). The authors explain that farm debt to finance capital purchases increases following highly profitable periods, and that farmers use accumulated wealth to finance more capital purchases. Profits in agriculture are cyclical, so it is important evaluate a farm's overall financial position before adding significant debt to make new capital purchases while considering what might happen if farm income declines.

Area farm management specialists can help farmers evaluate new investment decisions based on the asset's ability to pay for itself and generate farm revenue under a variety of scenarios.

## Farm bill debate continues

The U.S. Senate passed its version of the 2013 Farm Bill entitled the Agriculture Reform, Food and Jobs Act of 2013 on June 10<sup>th</sup>. Primary aspects of the bill include eliminating direct payments, counter-cyclical payments, the Average Crop Revenue Election (ACRE)

program, and moving to a more risk management-oriented system. The bill proposes shifting toward a stronger crop insurance program but would continue disaster relief provisions as part of farmers' safety net. It would also require farmers to comply with

conservation programs to receive a cost-share on crop insurance premiums, even though spending on conservation programs would also be cut. Finally, the bill allows for \$3.5 billion in spending reductions for the Supplemental Nutrition Assistance Program (SNAP) over 10 years and attempts to reduce fraud in the program. The Senate bill is designed to save taxpayers approximately \$18 billion over 10 years.

The U.S. House failed to pass its version of the farm bill, the Federal Agriculture Reform and Risk Management (FARRM) Act of 2013. The House version was similar to the Senate version in that it would eliminate direct payments and scale back commodity programs, place a greater emphasis on crop insurance as a risk management tool, and reduce government

spending over the life of the bill. One major difference in the House version of the bill was the reduction in SNAP spending. The House version contained a reduction of more than \$20 billion, which was opposed by many Democrats and the White House. The farm bill's future is uncertain as Congress begins to rework the bill. If Congress fails to pass a new farm bill or to extend the 2008 farm bill that expires on September 30, farm policy will revert to the permanent legislation contained in the 1949 farm bill.

For a more detailed explanation of the differences between the two Congressional Chambers' versions of the bill, see the Congressional Research Service report at <http://www.fas.org/sgp/crs/misc/R43076.pdf>.

## Concluding thoughts

If you have questions about a specific topic and think others would benefit from learning about it, do not hesitate to contact us, and we will find out more information for you and include an article in the newsletter. You may contact Jason Fewell, coordinator of the MANAGE Program in the Department of Agricultural and Resource Economics at the University of Tennessee, at 865-974-7410 or email [jfewell@utk.edu](mailto:jfewell@utk.edu).

The MANAGE Program is intended to help farm families achieve their life's goals. Help is

offered on an individual basis to those who wish to improve their financial situation. All information is kept strictly confidential. Specialists can be found by contacting local Extension offices or by calling the MANAGE Information Line at 1-800-345-0561.



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