Staff Paper

Completing FINAN & Net Worth Statements – Some Issues

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I. Introduction

We welcome all Michigan State University Extension (MSU-E) agents embarking upon a journey to improve the accuracy and usefulness of Michigan farm record data. We believe that analysis of accurate farm records will enable the farm owner/operator(s) to use his/her (their) farm records as a diagnostic tool that in turn can provide a benchmark for planning. We do recognize that this activity requires a time commitment from the MSU-E agent and also a willingness to bear some responsibility in improving the accuracy and consistency of the farm record database. It is to this problem of farm record consistency that this paper is addressed.

II. Net Worth Statement

A necessary condition that must be met in order to conduct a farm business analysis is to have consistent beginning and ending net worth statements (balance sheets). The term "consistent" suggests that similar counting and valuation methods were used on both the beginning and ending balance sheets in determining the dollar valuation of the assets and liabilities at the point in time stated on the balance sheet.

A. Some Issues

Issue 1. Farm Identity

The farm business organization can be complex with multiple owners, multiple generations, an operating entity renting land from the owners, etc. Know and clearly identify which farm business organization is being described and analyzed. It may be necessary to have multiple balance sheets – one for each farm business organization and one for the whole farm.

Issue 2. Cost and/or Market Valuation of Assets

Recommendation: A two-column balance sheet that contains both the cost and market value of non-current assets is recommended. By providing both cost and market value of the non-current assets (intermediate and long-term), the change in net worth over time can be attributed to two sources. One source is from profits retained in business (retained earnings). A second source is from appreciation in market value of assets. If time or data limit that which can be completed, the market value balance sheet would be preferred.

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Issue 3. Date

Recommendation: Remember that the Net Worth statement is a picture of the farm's assets and liabilities on the date specified. For a calendar year business analysis, the date recommended is the last day of the year; i.e. 12/31/xx.

Issue 4. Amount of Detailed Data

Recommendation: One guideline is to keep no more detailed data than is or will be useful for analysis. The difficulty is in anticipating what will be useful. Finpack makes possible the descriptive listing of most asset and liability categories. Keeping these details on the data file will avoid reliance upon human memory that often becomes foggy in a relatively short period of time.

Issue 5. Valuation of Current Assets

Recommendation: Current assets, defined as cash or items that will be sold for cash within one year, should be valued using the net market price of the asset at the farm site. Because of the price differential (basis) that creates unique prices at various geographic locations, it is most appropriate that prices appropriate to the area be used.

Issue 6. Value of Growing Crops

Recommendation: Winter wheat and perennial alfalfa to be harvested are two of the more common crops that ought to be included as a current asset when preparing a Net Worth Statement that is dated during the winter non-growing season. The value per acre of an annual crop like winter wheat is often determined by the cost of the inputs in getting the seeding established. The value per acre of a perennial crop like alfalfa can be conservatively estimated as the annualized cost of establishing the seeding plus the net value of the legume; e.g. nitrogen credits that benefit the next crop in the rotation system.

Issue 7. Government Program Payments

Recommendation: Enter as an account receivable those guaranteed government payments that have been earned but not yet received. Similarly, enter as a negative account receivable those government payments that were received early before being earned. Examples are:

a. Direct Payments -- based on historical crop acres for program crops as corn, soybeans and wheat; respective proven historical yields, and respective direct payment rates for each commodity; for last year that are received this year are an asset under accounts receivable (AR).

b. Direct Payments for next year that were received this year – are a negative AR.

c. Conservation Payments for past year – Conservation Reserve Payments (CRP) that are elected to be received in the year after being earned are an AR

d. Homestead Property Tax Credit -- Homestead property taxes that have been paid and exceed 3.5% of your household income can be claimed as a credit on your state of Michigan income taxes for past year's earnings. This income tax credit (can not exceed a maximum of $1200.) to be received is a current asset on the net worth statement.

e. Farmland Preservation Tax Credit – P.A. 116 is a State of Michigan law that refunds to farmland owners the property taxes in excess of 3.5% of household income on property covered by a Farmland Development Rights Agreement with Michigan Department of Agriculture. The credit to be received is a current asset.

Issue 8. Patronage Dividends

Recommendation: Patronage dividends are often received as a split between cash and certificates. Although the entire amount should be declared as income on the farm accounts, the certificate portion of the dividend should remain on the farm's net worth statement as a non-current (intermediate) asset identified with the cooperative.

Issue 9. Cost Value of Raised Breeding Livestock

Recommendation: Using the "Base Value" method, a value is established for each defined category of livestock. As raised animals progress through their life cycle; e.g., open heifer, bred heifer, milk cow to cull cow; the value of the animal changes as it changes categories. (Please note that this treatment of raised breeding livestock differs from rules used by the Internal Revenue Service (IRS) whereby the cost basis for all raised livestock is zero.) By assigning a value to these raised breeding livestock, more realistic profitability measures as net farm income and return on investment can be calculated.

Issue 10. Cost Value of Purchased Breeding Livestock

Recommendation: The cost value of purchased breeding livestock categories should be the same as the raised livestock using the "Base Value" method. Thus, cost values are identical within the same category of breeding livestock, be it raised or purchased. It may be desirable to foot note the current tax basis which is the original cost basis minus accumulated depreciation.

Issue 11. Market Value of Breeding Livestock

Recommendation: Use the "Base Value" method. Base Value for the various defined categories of breeding and working livestock would be adjusted every 3 to 5 years. These "Base Values" are driven by the profitability of the livestock industry but are not adjusted as often as are values for market livestock. With the "Base Value" method, values of breeding livestock within the same descriptive category will be identical for both the cost and market value net worth statements. For breeding livestock to be culled during the year, it is appropriate to list these animals at their cull value as current assets under market livestock. Do not double count.

Issue 12. Cost Value of Farm Improvements on Real Estate

Recommendation: The cost value of the bare land should be separated from the improvements as facilities, tile, and perennial crops such as orchards. The cost value of an improvement is the original cost basis minus the accumulated depreciation.

Issue 13. Market Value of Farm Improvements on Real Estate

Recommendation: Bare land and improvements ought to be valued together if they can not be separated for sale; e.g. subsurface drainage tile.

Issue 14. Market Value of Land

Recommendation: The market value of farmland is driven not only by agricultural productivity, but also by its location and associated amenities. It is recommended that the agricultural component of land value be included as a long-term farm asset, but that the component of land value associated with non-agricultural demand factors be included as a long-term non-farm asset.

Issue 15. Non-farm Assets & Liabilities

Recommendation: Non-farm Assets and Liabilities need to be separated from farm assets and liabilities. This separation enables more accurate calculation of financial performance measures for the farm business. For those assets that may have a dual purpose for farm and non-farm uses, if the asset is listed on the depreciation schedule, consider it a farm asset.

Issue 16. Credit Cards

Recommendation: Some farm expenditures can be quickly and easily made through use of credit cards. It is important that the amount of any unsecured outstanding short-term credit card obligation be accurately reported on the net worth statement. The issue is whether the farm expenditures on the credit card are currently being claimed as an expense, or not being claimed as an expense until being paid. The key words are “Has it been expensed yet?” If expenditures on a credit card are being claimed as an expense before the bill is actually paid, the outstanding amount should be a current liability under an operating loan. The position of the IRS is that a credit card purchase for farm items is an expense because the credit card company is loaning the money to the credit card user. However, if the practice consistently used on the farm is that expenditures on a credit card are not being claimed as an expense until the bill is actually paid, the outstanding amount should be a current liability under accounts payable.

Issue 17. Term Loans (Liabilities)

Recommendation: Term (non-current) loans are by definition financed over more than one year. The interest rate and length of each loan should be specified in order to accurately calculate the balance sheet ratios. However, some constraints on data availability or time may necessitate the need to group loans by category. For intermediate loans, it is suggested that an average 7% annual percentage rate of interest (APR) and 5 years be used. For long-term loans, it is suggested that an average 6.5% APR and 15 years be used. These default parameters permit calculation of the current portion of the intermediate and long-term loans in order to estimate the balance sheet ratios.

Issue 18. Capital Leases

Leasing provides an alternative way to control the services provided by capital assets as machinery, equipment, and buildings. Producers use leasing for various reasons; e.g. to expense out the entire payment, to provide flexibility, to enable quicker control of asset, and to avoid creditor constraints.

Leasing provides to the farmer/lessee an opportunity (risk) of equity increase (decrease) in the capital asset as lease payments are made over the years of the lease. The remaining total of lease payments on the date of the net worth statement can be considered as a liability. An offsetting asset is the fair market value of the leased item which may be more than (gain in equity) or less than (lose in equity) the obligation of lease payments.

Issue 19. Contingent Liabilities

Recommendation: Knowledge of contingent liabilities is critical in accurately determining a market value balance sheet. However, to simplify the balance sheet preparation, this section may be omitted with the admonition that contingent liabilities owed to the IRS because of a farm sale are important for those farms planning to sell or evaluating estate planning alternatives.

III. FINAN Input

Issue 1. Input Description (Page 1)

Recommendation: Most of our FINAN runs will be for the calendar year that is specified. The alternative is that some farms may be on a fiscal year that does not start in January and end in December. Regardless, beginning and ending balance sheets for the specified period must be identified. The type of analysis will be "whole farm" only. We would like the farm data to be included in a group summary by entering "yes."

Issue 2. Farm Identification (Page 2)

Recommendation: Page 2 occurs if a "yes" is entered in response to the group summary question. Each farm needs to have a unique identification to enable an audit trail. The farm number being suggested is the TELFARM number preceded by the Crop Reporting District. For example, number 7140025 would indicate that southwest crop reporting district (#7), Cass County (#14), and farm #25 in that county. For farms not on the TELFARM system, a unique number needs to be created whose first three digits should indicate the crop reporting district and the county followed by a digit sequence not previously used in that county.

Issue 3. Farm Business Defined

Recommendation: Be clear about the defined boundaries of the farm business in order to avoid problems with internal transactions and double counting. Consider the case of a farm partnership renting land to be farmed. If cash farm rent were included as an expense of the farm business, the rented farm acreage would not be an asset of the business being analyzed.

Issue 4. Income from Sales of Cull Breeding Livestock

Recommendation: Income created by normal culling of breeding livestock should be entered on page 11 under “Cull breeding livestock” and should not be on page 3 under “Capital Sales.” If the herd is sold or a reduction in breeding herd numbers was a desired goal, then show this reduction in capital sales. Sales and exchanges of capital assets that are held longer than one year, that are used in business to produce income, are defined by IRS as 1231 transactions.

Issue 5. Estimated Value of Labor and Management (Page 16)

Recommendation: It is important that a realistic estimate be provided for the value of unpaid family labor and management. This estimate in entered in the “other information” section of the input. This amount is subtracted from net income in determining return on investment for the farm business. In FINLRB, a calculated estimate using 7 dollar per hour ($7/hr) plus 5 per cent of the value of farm production (5% * $VFP) is provided. The value per hour needs to be consistent with lower paid employees who do not have management responsibilities. The value of unpaid family labor and management may or may not be reflective of the amount spent for family living expenses.

Issue 6. Estimate Hours of Unpaid Labor and Management (Page 17)

Recommendation: An estimate of the unpaid hours of labor and management provided by the farm family is entered in the “Labor” page. These hours should be consistent with the dollar value of labor and management discussed above.

Issue 7. Size of Crop and Livestock Enterprises (Pages 19…)

Recommendation: To have a complete FINAN input form capable of providing sufficient data for business analysis, it is necessary that the enterprise information be entered.

Issue 8. Depreciation

Clarification: The non-cash expense of depreciation is calculated, not entered on the FINAN input form. Depreciation is calculated based on data from the beginning and ending balance sheet combined with capital sales and purchases. The calculated depreciation amount is the difference between:

+ $ Ending Asset Value
+ $ Capital Assets Sold

And

-$ Beginning Asset Value
-$Capital Assets Purchased.

The result above (a negative number) should match the tax depreciation on IRS form 4562 plus the gain or loss on capital items sold during the year shown on IRS form 4797.

Issue 9. Capital Leases

For business analysis we need to treat leasing similarly to a purchase with borrowed money. A commitment has been made to make future payments that are analogous to borrowing money for capital asset purchase. To ignore leasing commitments misrepresents the business's financial position.

The lease payment is an expense for business analysis purposes. A trade-in of old machinery for payment on the initial lease payment would be considered a capital sale, and the offsetting lease payment an expense.

If lease transactions are entered correctly, the net effect of the lease on capital adjustments as summarized in the "Other Assets" of the "Depreciation and Other Capital Adjustments" section in the FINAN Income Statement should net out to zero.

IV. Summary

Better information is the keystone to better decision-making. It is necessary that Beginning and Ending Net Worth Statements be accurate and consistent in order to prepare a reliable financial analysis of the individual farm business. As the individual farm analyses are improved, the comparative database that can then be built will have increased validity as a management tool for each farm's use.

MSU-E agents involved in agriculture have the opportunity to exploit our comparative advantage in accessibility to data and to farmers. By positively contributing to the management information system of many of Michigan's finest farm businesses, MSU-E and Michigan agriculture can create a win-win situation. It is with this goal in mind that this paper makes some small contribution to enhancing our capacity to help others.