Depreciation: Balancing the Short Game Against the Long Game, A United States Perspective

IFMA22: Growing Agriculture @ 41 Degrees South

Launceston, Tasmania

March 2-8, 2019

Guido van der Hoeven, Extension Specialist / Sr. Lecturer

North Carolina State University

And

J.C. Hobbs, Associate Extension Specialist

Oklahoma State University

Overview of US Depreciation Rules

- Capital Assets (those with a useful life greater than one year) costs are allowed to be recovered by claiming a depreciation expense:
  - Modified Accelerated Cost Recovery System (MACRS)
    - General Depreciation System
      - Recovery Periods: 3, 5, 7, 10, 20, 27.5, and 39 years
    - Alternative Depreciation System
      - Allows for longer recovery period to be chosen; e.g., 5 year assets now 7, dairy cows for example

Accelerated Depreciation Allowed

- Internal Revenue Code (IRC) section 179
  - $1,020,000 2019 maximum, up to $2,550,000 investment limit
  - Taxpayer can pick a “amount” to get to a desired sweet spot
- IRS section 168(k) “Bonus” depreciation
  - Allows for 100% deduction against business income, no limits
  - Use of bonus depreciation is presumption of tax law
  - Will decrease to 0% by January 1, 2027

Farm Management Implications

- Depreciation options available allow farmers to choose from 8 different methods to recover costs of equipment, machinery and breeding and dairy animals.
  - The paper illustrates, with several examples, management implications of making a depreciation method choice.
- With ability to deduct 100% of equipment purchase, a farmer can aggressively reduce his/her income tax and social security tax liabilities
  - Doing so may lead to financial risk

Possible Financial Risk of 100% Deduction

- Using either IRC § 179 expensing or IRC § 168(k) bonus depreciation, debt repayment structure will not match with depreciation expense
  - Principle payments are not deductible business expenses
  - If the 100 percent cost recovery was taken in the year of acquisition, subsequent depreciation expense deductions are not available to offset principle payments during the course of the loan repayment period; these payments are made with taxable funds.
  - Here in lies the potential financial risk.

Example to Illustrate the Financial Risk

- Heeza Farmer purchases a $200,000 machine and finances 100% over 5 years.
- Heeza chooses to recover the cost in the year zero (the acquisition year), thereby receiving the entire tax benefit in one year.
- However, Heeza commits to $40,000 of principal payments over years 1-5 of the term.
- Heeza’s expense ratio is 0.85, or he has a 15% profit margin
- Heeza must generate $266,667 of gross farm revenue ($40,000/0.15) to meet the $40,000 principal payment.
- Financial Risk may exist, if income is reduced: weather, market or external factors (tariffs) making cash flow tight.

Discussion and Reality

- Heeza has enjoyed the tax benefit in the year of acquisition, however, didn't "save" the money to help pay the tax bill in subsequent years. A financial risk may become evident.
- Heeza could have made a different choice to recover the machinery cost in the year of acquisition, the range of which is 100% (using expensing or bonus) to 5% (the slowest method available)
- Farmers are very good at kicking the "tax can" down the road, however, after 40 years of doing so, the tax bill comes due at retirement and can be significant.

Conclusion and Further Research

- This paper raises awareness, in the U.S. context, of potential financial risk.
- Income tax data from the Internal Revenue Service (IRS) about depreciation methods may help evaluate financial risk exposure.
- Future access to such data may help evaluate and improve long-run sustainability of farm businesses by making optimal decisions relative to recovery of capital asset costs.

Thank you !! Questions

- Guido van der Hoeven, gvanderh@ncsu.edu
- J.C. Hobbs, jc.hobbs@okstate.edu