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# Managing Financial Risk in Agriculture

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Farmers and ranchers deal with a significant amount of uncertainty every day. From not knowing what the weather will be like this year to wondering if market prices will increase or decrease tomorrow, agricultural producers are forced to make decisions based on imperfect information. Born out of this uncertainty is the possibility of injury or loss. Risk can be defined as the possibility of adverse outcomes due to uncertainty and imperfect knowledge in decision making. Each time a farmer plants his fields it is possible the weather will destroy his crops. Each time a feed-lot operation purchases calves, they risk a loss if market beef prices fall.

And each time a dairy producer milks cows, he risks being kicked in the face.

Given the changing structure of the agricultural industry, managing risk has become vitally important to the success of agricultural operations. Among the risks farmers face is financial risk. Financial risk exists because of the need to finance business operations and maintain cash flow levels adequate to repay debts and meet other financial obligations. The ability to secure necessary loans is vital to many farm operations, but borrowing money introduces numerous risks. The willingness of lenders to supply loans now or to continue to

supply needed funding in the future is uncertain and volatility in interest rates produces an added risk to borrowing. These risks are largely influenced by greater economic factors and changes in financial markets mostly out of the individual farmer's control. In addition, changes in market values of loan collateral could also adversely affect agricultural producers' ability to maintain a profitable enterprise.

Production and marketing risk also contribute to financial risk, relating directly to cash flows and the ability to secure and repay loans necessary for operation. Since production levels and commodity prices produce the revenue with which farmers can meet financial obligations, it is significant to recognize how interrelated these different types of risks are, and to make managing these risks an important priority.

## **Management Tools**

There are many tools available to help farmers manage financial risk. Which tools a farmer uses should depend on his individual farm situation and risk-bearing willingness and ability. An understanding of the tools available for managing financial risk can help agricultural producers develop better marketing plans that can reduce those risks and increase profitability.

### ***Records***

A key to a farmer reducing financial risk is to know his financial situation. By having good farm records, a farmer can evaluate where he has been, where he is now, and whether or not he is moving in the right direction. Good

financial records allow a farmer to better understand his financial risks and in what areas he needs to improve his financial situation.

By evaluating balance sheets, income statements, cash flow statements, etc., a farmer can more adequately evaluate his financial performance and make more financially sound decisions regarding his enterprise. By knowing his current debt-to-asset ratio, he can make better decisions when securing loans and can possibly get a lower interest rate on loans by lowering that ratio. Cash flow statements allow a farmer to see trends in revenue and expense levels that can help him ensure adequate cash flows to meet his financial obligations. These statements also provide relevant information to help him better manage marketing risks.

Increasing the net worth of the enterprise is also vitally important to managing financial risk, and a farmer's records allow him to see if and by how much his net worth is increasing each year. By examining financial records, a farmer can evaluate his liquidity and solvency and lower his financial risk by maintaining adequate liquidity and increasing the solvency of his operation. In short, good financial records reduce a farmer's financial risks and guide him to take actions that will improve the overall profitability of his enterprise and better secure its long-term success.

### ***Smart Loans***

If loans must be secured for large amounts of money or long periods of time, getting a fixed interest rate reduces the financial risk associated with the loan. A variable interest rate may increase in later years of the loan, making

repayment difficult or impossible. While a fixed interest rate may be slightly higher at the beginning of the loan, the cost of the loan will not increase over the life of the loan.

Self-liquidating loans also reduce financial risk. Self-liquidating loans, essentially, are loans which can be repaid by the productivity of what the loan was secured to purchase, such as loans for crop production and dairy cows or feeder cattle. A crop production loan can be paid off when crops are sold, a loan for dairy cows can be repaid with the sale of the milk the cows produce, and a loan for feeder cattle can be repaid when the cattle are sold.

### ***Reserves***

Maintaining liquid and credit reserves can also protect a farmer against adverse effects of financial risk. A liquid reserve of cash or other liquid assets can be easily used if needed to weather financial difficulty. Similarly, many financial institutions offer various types of credit lines and many farmers borrow amounts below their imposed credit limit. Such credit reserves allow the farmer to obtain additional loan funds if necessary to continue operation under adverse financial situations.

### ***Renting/Leasing***

Renting or leasing land or machinery can reduce financial risk. By renting or leasing land, a farmer can avoid the financial risk associated with a large land loan. It is important to note, however, that rental and lease agreement may introduce other human and legal risks of which the farmer should be aware. In this case, diversification by setting agreements with various land owners can reduce the risk of one

land owner's choices negatively affecting the farmer's enterprise.

As with land, renting or leasing equipment can also lessen financial risk by making equipment loans unnecessary. Further, if the rented or leased equipment is newer or more reliable, the farmer can avoid the production risks associated with an equipment breakdown or the need to pay for costly repairs.

### ***Manage Marketing and Production Risk***

To adequately manage financial risk, it is imperative that a farmer manage his marketing and production risk. The production and marketing of an agricultural product creates both expenses and revenue for a farmer. By managing production and marketing risk, a farmer can reduce his risks of devastating revenue loss due to production loss or lower commodity prices. By managing these risks, a farmer better ensures he will be able to meet his financial obligations and secure and repay loans, thus reducing the overall financial risks he faces.

### ***Off-Farm Employment***

To reduce financial risk, in some cases it is necessary and in other cases it is wise to secure some type of off-farm employment. Whether it is the producer, his spouse, or another family member who finds another job, off-farm employment ensures a cash flow that is unrelated to the farm's success and that allows the family, and sometimes the farm, to survive in difficult times. Further, off-farm employment may offer health insurance, a retirement

program, life insurance, or other benefits that would be much more costly to the farmer otherwise.

Given the recent financial turbulence in the overall economy, it is not difficult to see the importance of managing financial risks. There are many ways farmers can manage financial risks, including: maintaining good financial records and evaluating his financial position,

making smart loan decisions, maintaining cash and credit reserves, renting or leasing as opposed to owning land or machinery, managing production and marketing risks, and securing off-farm employment. By utilizing these and other risk management tools, a farmer can reduce the risk he faces and develop a more stable and profitable enterprise despite the uncertainties inherent in the agriculture industry.

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