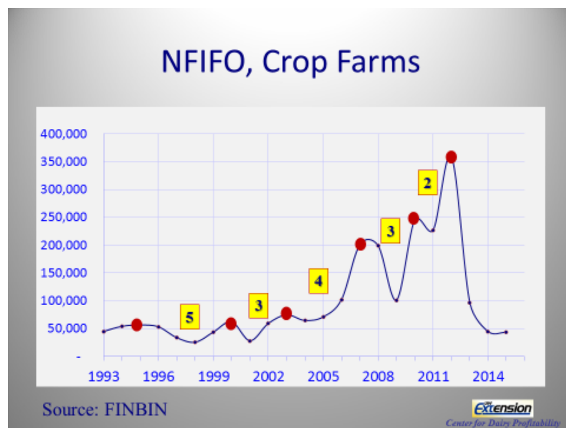
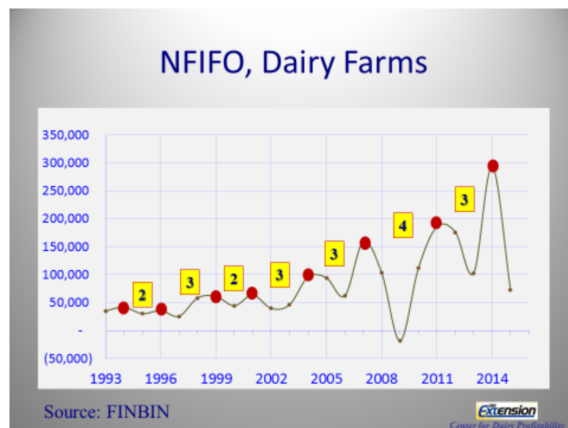
Managing at the Bottom of the Farm Income Cycle

February 2017, By Kevin Bernhardt

The Agriculture Income Cycle

Agriculture is a cyclical business. The two charts below show "Net Farm Income from Operations" (NFIFO) for crop and dairy farms from 1993 through 2015. There are large dots on high-income years of each cycle with the number of years shown between cycle highs.





As 2017 begins, agriculture is near the bottom for both commodities. Farmers are asking many questions on how to survive tight margins and what to do differently at the bottom of the income cycle. Strategically, the answer is the same. The same strategic business management[1] that strives and plans for low cost, high production, sound marketing, good risk management, and continuous sharpening of one's own saw[2] is the same at the bottom of the cycle as it is at the top. Further, accomplishing those strategies requires information, tools, and analysis that is the same whether at the top or bottom of the cycle including, but not limited to:

- Good and accurate records
- Using those records to analyze and inform management decisions
- Knowing costs of production
- Creating and following marketing plans that adapt to current situations
- Maintaining strong working capital
- Planning for profits through budgeting
- Tracking budgets for variances from plans
- Continuously "keeping up" on latest technologies, markets, and management practices

What does change, depending on where in the income cycle the world is at, is how tactically to implement farm management strategies. For example, the strategy of budget planning at the top of the cycle may tactically include pushing production to take advantage of prices and using profits to pay off non-productive debt, build a higher reservoir of working capital, and replace machinery. At the bottom of the cycle, budget planning tactics might shift focus to managing cash flow through cutting expenses, postponing capital asset purchases, and curtailing withdrawals.

---

[1] Strategic management involves the formulation and implementation of major goals and initiatives to accomplish strategic objectives of the owners. Financial performance is an assumed strategic objective.

[2] Sharpening the saw is a term used in Stephen Covey's 7 Habits of Highly Successful People and refers to continuously learning and educating one's self to be better at their job or life.

Tactics for the Bottom of the Income Cycle

Use, Maintain, and Grow Working Capital.
Working Capital is what the farm has in cash or assets that can quickly convert to cash. There is a reason one builds their working capital during the high-income years and that is to have it as a risk management tool in low-income years. Even in the low-income part of the cycle, maintaining or building working capital is still a recommended strategy, but there are different tactics for accomplishing the strategy. Selling inventory, reducing farm withdrawals, new borrowing or restructuring debt, delaying capital asset purchases, and/or selling capital assets are tactics for periods of tight margins. How much working capital to have depends on the type of farm and other circumstances, but a rule-of-thumb is 30% or more of expected total revenues or expected total expenses. Fifty percent would be even better, but at minimum, a commodity farm business wants to maintain 10%-20%. Potential tactics include:

1. Sell Inventory.
   Selling inventory (grain, feeder pigs, etc.) is a normal part of farm operations. A tactic in low-income years is more aggressively sell inventory. This may mean sacrificing greater future income created by holding the inventory. Depending on the situation and the type of inventory, a manager may be able to use marketing tools to continue ownership while still generating cash through sales of the physical inventory. Another tactic is a short-term bridge loan that generates needed cash (loan proceeds), but allows taking advantage of more timely sales of inventory. The latter is much more palatable to the lender if the revenue stream is secured through price risk management tools.

2. Reducing Farm Withdrawals.
   While no one is eager to live more frugally, challenging profit margins call for belt-tightening. Family living and withdrawals for non-farm related reasons need assessing with short-term sacrifice in mind. The following tactic is new borrowing or loan restructuring, which is a more viable option to a lender if austerity measures on family living and withdrawals can be shown.

3. New Borrowing or Loan Restructuring.
   New borrowing to pay current bills, versus buying new capital assets, is a tough argument with a lender. The new capital asset will return future profits to pay the loan, but borrowing to cover current bills has no promise of future revenue. Nevertheless, it may be a short-term tactic to make it through times of tight margins. Loan restructuring may be a more agreeable option with your lender, especially for capital assets that do not depreciate – land. For example, a 10-year mortgage restructured to 20 years creates a lower payment each year and creates current cash flow. In addition, pulling out some equity may also be an option in the restructuring; however, remember that it puts an increased burden on future profits.

4. Selling Capital Assets.
   It is likely that many of the capital assets on the farm (tractors, cows, land, etc.) have equity in them and worth more than the borrowing against them. Therefore, selling them provides cash to pay the loan and provides working capital for current operations. However, the benefit of creating current cash comes at a cost. The cost may be tax consequences and the lost future income potential of that capital asset, the cow is no longer around to produce future milk and calves. Consideration should be given to the type of capital asset sold based on the income-generating ability of that asset.

5. Reduce Expenses.
   When profits are down and cash is scarce, reducing expenses seems obvious. This tactic works if the amount saved is greater than the income given up. The dairy farmer has many choices of what to feed their cows, but not all those choices ultimately save money because the value of production lost is greater than the cut in feed expenses. Former UW-Extension agent Ken Bolton stated “When does a

savings, in-fact, become a sacrifice." Mike Hutjens, University of Illinois, commented that you should never give up milk as even the last pound of relatively expensive feed likely has a positive return from the milk it produces. Therefore, while changing the quality of the feed may not be the best option, what is paid for feed or the land used to produce feed might be an area of cost savings. Renegotiating contracts, comparison-shopping, or bulk purchases may be ways of reducing expenses without reducing associated production potential. Even little cost reductions help. A reduction of $25 per acre on 200 acres is $5,000. That will not save the farm, but it helps pay some bills in tight times.

Marketing.

Marketing is a sound strategy in good and poor margin times. However, tactics and marketing goals may be different throughout the income cycle. Some marketing food-for-thought:

1. Marketing will not save the farm when margins are tight! Nor, will marketing promise the highest price when profits are good. A marketing goal to get the highest price is fraught with potential failure. However, a marketing goal to assure a future price, reduce the volatility of market prices, and give the manager greater ability to plan budgets, borrowing, and spending accordingly is very achievable.

2. Marketing is trying to shoot a deer in the dark with a blindfold on if costs of production are unknown. Costs of production give a benchmark for marketing and planning. David Kohl noted that if you do not know your costs of production then "you have failed one of the tests of business sustainability in tight times."

3. Leave upside price potential if cost effective. There is a trap in commodity marketing that when price is the lowest, the interest in marketing is the greatest, and the potential to secure a low price is also the greatest. It is a simplistic analysis, but when prices are low then there is strong precedent that future price movement will increase. If one markets in low price times to avoid the risk of even lower prices, then cost effective ways to leave upside price potential open should be considered (examples: PUT option, forward contract and buy a CALL option, etc.).

Tools You Can Use

Many analysis and decision-making tools are always good including during periods of tight margins.

1. Ratio Scorecard and DuPont Financial Analysis Tools.
   It sounds obvious, but a great way to avoid financial challenges is to be profitable. The Ratio Scorecard and DuPont financial analysis are diagnostic tools that can help the manager assess the status of profitability and determine areas of deficiency and/or opportunity. These tools can help the manager assess the strength of debt structure, repayment capacity, asset utilization, and efficiency. These tools require complete and accurate accrual adjusted income statements and balance sheets.

2. Budgeting and Variance Analysis.
   While saying it is easier than doing it, there is value in planning for profits then following the plan. Budgeting is a planning tool that allows the manager to plan for what they think will and/or want to happen. The "real" value in a budget is tracking it throughout the year and determining the difference, or variance, between plans and actuals. If done monthly, for example, then corrective actions can be made, including communication to the lender well in advance of potential shortfalls. Budgeting tools include enterprise, whole farm, and cash flow budgets. Cash Flow budgets are particularly important in periods of tight margins. The Cash Flow budget plans for incoming cash, outgoing cash, and borrowing needs.

3. Partial Budget.
   The Partial Budget is a budget-planning tool that allows the manager to evaluate potential changes (new ration, cow grouping, different tillage system, etc.). It is based on asking four questions:
   1. What new revenues will be generated if the change is made
   2. What current costs will be reduced/eliminated if the change is made
   3. What will the increase in costs be if the change is made
   4. What current revenue will be lost if the change is made

   One and two result in new/increased revenues, and three and four result in new/increased costs. Subtracting costs from revenues tells the manager if the change is profitable and by how much.

Summary

In periods of tight margins, the goal for some is survival, survival until better profitability. For many that will boil down to creating cash and paying bills with minimum sacrifice to long-term viability. A few tactics for doing so are listed here. There are, of course, many more. For example, Tom Kriegl's article, "Profitable Practices for Tough Times" (Extension Responds, July 20, 2012) provides a 17-point list. However, when the storm clouds pass and margins are more favorable, the sustainably profitable operations will get back to work preparing their operation to be resilient for the next downturn. There are many more options when margins are good to protect the farm business for the next downturn. Said another way, if we become a little too comfortable and laissez-faire at the top of the cycle, the bottom becomes much more challenging.

Resources:

- Cash Flow and Partial Budget Spreadsheet decision tools: contact Kevin Bernhardt at bernhark@uwplatt.edu, 608-342-6121.
- Bernhardt, Kevin. "Drought 2012: Partial Budget." July 19, 2012. http://fyi.uwex.edu/drought2012/2012/07/19/drought-2012-partial-budget/
- Bolton, Ken. "Dairy cow feeding economics or; 'When does a savings represent a sacrifice?'" July 9, 2010. http://fyi.uwex.edu/news/2010/07/09/dairy-cow-feeding-economics-or-%E2%80%9Cwhen-does-a-savings-represent-a-sacrifice%E2%80%9D/
- Heslip, Nicole. "Mike Hutjens Audio: Strategies for dairies in times of low prices," Brownfield Ag News for America, March 29, 2016, https://brownfieldagnews.com/managing-for_profit/strategies-dairies-times-low-prices/
- Kohl, David. "Strategies for handling tighter margins in agriculture," Corn and SB Digest, Aug 04, 2014, http://www.cornandsoybeandigest.com/blog/strategies-handling-tighter-margins-agriculture
- Kriegl, Tom. "Profitable Practices for Tough Times." July 20, 2012. http://fyi.uwex.edu/drought2012/2012/07/20/profitable-practices-for-tough-times/

Author contact: Kevin Bernhardt, bernhark@uwplatt.edu, 608-342-6121

Article reviewed by Dr. Nate Splett, Center for Dairy Profitability