INSIGHTS REPORT

VOLUME 04 WHAT'S INSIDE

It's time to revisit input costs, hedging and diversification to manage heightened risk in the current ag economy.

Dr. Carl Zulauf of The Ohio State University discusses the elements of change in agriculture.

The 2016 production season is right around the corner. Experts from across our territory offer a synopsis of what to expect, and how to react to the economic situation in your area.

Every farm, business and community is unique. How can you adapt to changing local risks and opportunities while also keeping an eye on global trends and the nation's economy? With nearly 100 local offices and more than 1,200 employees, Farm Credit Mid-America is constantly working to help farmers in Indiana, Ohio, Kentucky and Tennessee leverage the economics of change in their favor. This report shares some of our insights to help you manage your operation and stand strong in today's competitive, ever-changing marketplace.

Gordon Hanson
Senior Vice President — Chief Risk Officer

TAKE A FRESH LOOK AT METHODS OF MANAGING RISK

REVISITING RISK IN 2016

With a continuing trend of low grain prices and interest rates still hovering near historical lows, we are seeing both critical opportunities and challenges as we move into 2016. When you consider risk management strategies, it's important to seize available opportunities and be realistic and proactive regarding increasing challenges. While all grain farmers hope for a rebound in grain prices, those who plan for the distinct likelihood of an extended period of low crop revenue and scarce profits will be best positioned for long-term viability and success.

While input costs, hedging and diversification are always key management factors, thoughtfully revisiting each in 2016 can help effectively manage the heightened uncertainty and risk in the upcoming production year.

A broader view of input costs

If you had overwhelming evidence that traditional farm input costs — like seed, fertilizer, chemical and fuel — were at historically low prices *and* you had the opportunity to lock in those prices for many years to come, what would you do? I believe thoughtful and proactive producers would jump all over that too-good-to-be-true opportunity. Well, this is exactly the opportunity that farmers have right now with historically low interest rates. While interest expense may not be viewed as a traditional input cost, most farmers need some form of financing to run their business *and* the opportunity currently exists to lock in the price of that financing at historically low rates. You can literally lock in the price of your equipment financing for the next three to seven years, or the price of your real estate financing for the next 10, 20 or even 30 years with long-term fixed interest rates. Try doing that with seed, fertilizer, chemical or fuel expenses!

After much foreshadowing, in December 2015, the U.S. Federal Reserve System started to nudge interest rates upward. While the current window of opportunity to lock in a low fixed rate is still very much open, many economists predict a steady series of continuing interest rate increases. After this current window of opportunity closes, there will be a lot of time for reflection. Some will undoubtedly have painful reflection and ongoing second guessing as variable and adjustable interest rates move higher and higher, adding ongoing uncertainty and increasing stress to an already challenging economic environment. Others will have stable, locked-in and historically low interest expense — providing an ongoing and likely increasing competitive advantage — and can focus on managing other volatility and business risks. So, while traditional farm production expenses have risen substantially and remain at stubbornly high levels, locking in historically low interest costs remains achievable, though this window of opportunity will undoubtedly be closing.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics, Data as of November 24, 2015.

Grain price risk — using luck or thoughtful planning

There will always be some crop producers who sell grain in the open market and occasionally fall into high prices that happen to coincide with harvest time or in the summer when they are forced to empty their grain bins. And that may have even happened with increased frequency in recent years. But let's be objective and honest: Is it luck or a thoughtful pricing and marketing plan? Related considerations include:

- Locking in minimal profits, or even a modest loss, is not enjoyable. Neither is riding the open market and ending up with even more adverse results.
- During an economic downturn with limited or perhaps no profit margin available, proactive risk management and stability become even more important.
- Lenders, landlords, suppliers and other business partners will value producers who demonstrate modern and progressive risk management that reduces uncertainty in the face of heightened volatility and economic stress.
- It is worth asking yourself if you're in the business of farming or riding the open markets. The first already involves material risks. The second is a separate choice that adds significantly more risk.

Luck, even recent luck, is not a sound substitute for a well-reasoned and proactive marketing plan. In contrast, a solid marketing plan with thoughtful forward pricing and hedging strategies provides meaningful price protection and speaks volumes about your commitment to effective risk management.

Diversification — a common risk management technique

Specialize or diversify? Both are valid strategies for farmers. But choose carefully and execute accordingly. For those that choose to specialize, achieving and maintaining high efficiency, including a low cost structure compared to their industry peers, will be key to reasonably assuring long-term viability and success. Higher cost operations will be among the first to succumb to a cyclical industry downturn.

Many farm operations will understandably choose to diversify as an effective risk management technique. There are several common diversification strategies, including:

- Produce several different crops to increase annual options and flexibility and minimize the risk of one commodity having abnormally low prices in a given year.
- Engage in both crop and livestock production. While certainly not always the case, profit margins for crop and livestock production often move in opposite directions as low grain prices lead to low feed costs. When grain prices are unusually low, running crop production through a livestock enterprise can be a desirable and profitable alternative.
- Supplement farm operations with off-farm income. A very popular and effective form of diversification, off-farm income can both bolster and help stabilize total income. The typical stability of off-farm wages is frequently a very desirable complement to more volatile farm risks and profitability.

Perhaps one or a combination of the above diversification strategies is right for your farm operation.

Proactive management of interest expense, a sound marketing plan, and thoughtful diversification can all contribute to strong risk management, increased stability and enhanced long-term success.❖

Dr. Carl Zulauf
Professor Emeritus—
The Ohio State University

ASSESSING AND UNDERSTANDING THE NEED FOR ADAPTABILITY IN MODERN AGRICULTURE

CHASING CHANGE: A Q&A WITH DR. CARL ZULAUF

Today's agriculture climate is synonymous with change, which is a tenet embedded within the fabric of the industry. Simply put, without change, there would be no farming. And without farming, there would be no change.

A professor emeritus in the Department of Agricultural, Environmental, and Development Economics at The Ohio State University, Dr. Carl Zulauf understands the essence and mechanics of agricultural change, and he's focused his teaching efforts on commercial agricultural policy and commodity futures and options markets. In these arenas, change is the only constant.

Farm Credit Mid-America met with Dr. Zulauf during the Farm Credit Insights Conference to discuss how change is affecting farmers today, and what they can do to avoid being left behind. With an understanding of where the industry has been and what it's currently facing, farmers can be better positioned to adapt to the ever-changing nature of the industry and continue to find success and profitability.

What should farmers consider when they think about the principles of change and adaptation?

Whenever you address questions about the ability to adapt, it's about you as the individual and what your strengths and weaknesses are. Valid and important questions are how comfortable you are with change and with what type of change you are comfortable. I know large farmers who are moving away from the conventional farming sector and making major adjustments, because they see opportunities. But I also know large farmers who don't want to go down that road. Either they don't see the opportunities, or they've mastered what they do, and they want to change and adapt within their current framework.

I think both lines of thought are equally valid, and neither is a criticism. What you worry about are managers who are not being honest in their assessment of themselves. There are a number of ways you can be successful, but you see farms and even businesses in other industries get themselves into trouble when they try to become something they're not. Chasing change for the sake of chasing change is just as bad as not trying to embrace the possibility of change. It's important to understand who you are, what markets you are involved with, and what you see as your strengths.

What does it take for a large farming operation to be nimble these days?

I like the word "nimble" as an objective of business. Being nimble is constantly looking for opportunities and being willing to adjust and pursue those opportunities. Every business, farm, or agribusiness has opportunities that emerge on a routine basis, if they're looking for them. Should you pursue an opportunity? That's a cost/benefit question, because you probably don't have the resources to pursue everything that comes up. But, I believe that opportunities are constantly being generated, and are there if you keep your eyes open and listen for them.

That's partly what the entrepreneurial spirit is all about. You don't always start with a long-range plan; you get there organically. Looking at successful farmers today, many grew themselves by taking advantage of emerging opportunities and making a distinct effort to capitalize on them.

Would you say we're in a "new era" of agriculture?

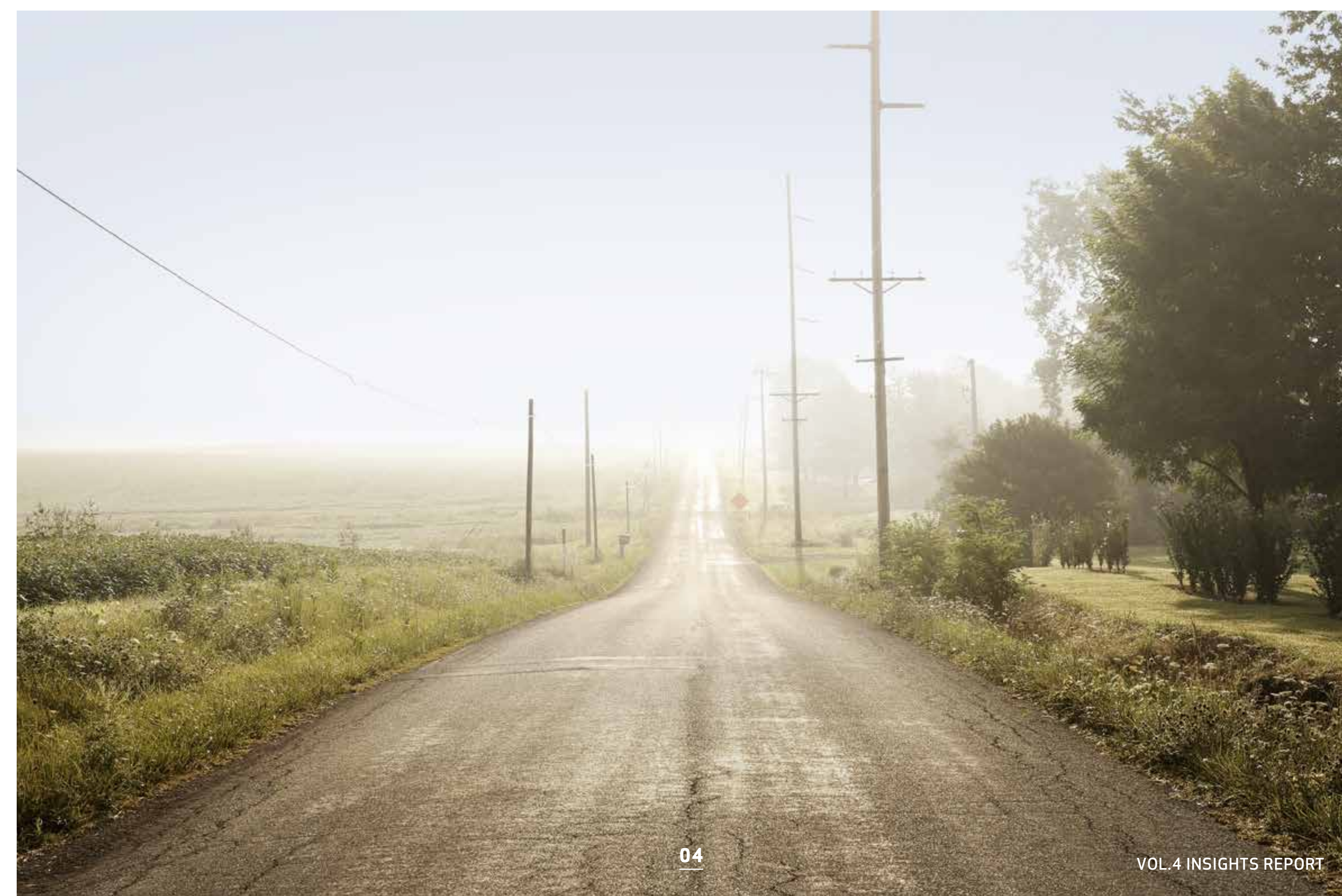
I think it's probably too soon to designate this as a new era. To do that, we need to show that we're not going to return to any previous era, including the period of prosperity from 2006 to 2013. I think it's hard to argue that we could return to a period of success like that, because we saw an incredible acceleration of demand for both food and biofuels. We know that as populations get wealthier, there is a diminishing increase in the rate of food consumption. It's not clear that the increase in worldwide food demand in the future can match what occurred from 2006 to 2013, and it is unlikely that biofuels policy will stimulate demand as it did from 2006 through 2010.

Now, could we revert back to a period like 1996 to 2005? I think that's a more open question. During that period, demand and supply growth were good, but reasonable balance and price variation resulted from both supply and demand surprises. It's possible that the coming decade could look a lot more like that period than many people think, but it's certainly debatable. I'm not sure we can designate the present as a new era, quite yet.

How can farmers prepare for the future, or future-proof themselves?

First and foremost, I think it's important for farmers to always focus on shrinking their per unit output of cash production costs, such as cash production cost per bushel, by two to four percent annually after adjusting for general economy inflation. We know the folks who survive are the ones with the lowest cash cost per unit of production—that's simply a principle of business. Being conscious of and trying to reduce the per-unit cash cost of production will always be a critical component of survival as a farm.

But, when you think about the future, I think you need to be asking yourself what you can do to increase the odds that you're doing what you want to 10 years from now. We discussed being nimble and taking advantage of the opportunities that present themselves, but it's also a matter of being discerning about those opportunities. Businesses with a grasp on why they're unique have an advantage in the long run because they can identify areas of strength and constraint to properly vet opportunities and navigate a changing agricultural environment. It's this type of awareness that sets operations apart and paves the way for success.



2016 BRINGS NEW CHALLENGES AND NEW OPPORTUNITIES

ECONOMIC SNAPSHOT FROM MID-AMERICA

To help prepare for the 2016 production season, Farm Credit Mid-America has arranged a snapshot of the economic landscape in Indiana, Ohio, Kentucky and Tennessee, trends that are likely to affect your operation, and recommendations to assist you in making the most informed decisions possible.

Indiana

We're seeing the grain segment pay close attention to working capital and expenses for this production year. As for livestock, particularly hogs and poultry, our customers saw tremendous growth in the fourth quarter. Land values have remained strong, with only a slight decrease in prices.

Indiana farmers are approaching 2016 by taking an in-depth look at all input costs. As in 2015, current assets and liabilities will need to be reviewed and closely monitored. Grain farmers are prepared to remain in a lower grain market for the next few years and are making critical evaluations of input needs such as equipment and seed traits.

As in any year, we recommend farmers sit down with their financial partner and bring their 2015 balance sheet so they both understand their cash build/burn rate and how to prepare for the next production season. It's extremely crucial in these conversations to bring the farm's long-term plan of what the next two to three years could look like.

Ohio

With low commodity prices and declining fertilizer costs at the end of 2015, grain farmers saw little incentive to pull the trigger on many typical year-end purchases. We continue to see producers store grain in anticipation of selling for higher prices at a later time.

Overall, high costs of inputs continue to be a challenge for producers as prices remain low. We're seeing some loan requests for reimbursement of funds for items where cash was originally used, as producers are looking to replenish some cash back into their operations while delaying capital expenditures.

As we approach the 2016 production season, we recommend farmers look at their past production history over a period of at least five years and identify agronomic needs to maximize their yields. Additionally, farmers may consider looking at the potential of their acres for added value and for planting and producing corn for ethanol use.

Kentucky

The landscape in Kentucky is healthy, thanks to record corn and soybean yields in much of the western part of the state. The cattle market has seen some slowdown over the past two months, but overall prices are still profitable. For 2016, we see many farmers in our state approaching agriculture in a cautiously optimistic way.

Trends in Kentucky are consistent with other states in our area. Equipment sales are slowing, grain farmers are storing grain in hopes of selling for higher prices, and high costs of inputs will continue to be a challenge. The diminishing capital position is reflective of farmers working through a year with lower grain prices.

We recommend farmers look at areas where they can hold on to cash in their operations and where costs can be cut, including cash rent prices. A key part of cutting costs is examining rate structure with a lender. Rates will continue to increase in 2016, so it's a good time to fix rates, especially on long-term obligations such as farm real-estate loans. Payment changes as a result of rate changes can have a serious impact on operations.

Tennessee

The agricultural landscape remains positive for Tennessee. Generally, farmers ended 2015 better than anticipated. Above-average crop yields across the state helped offset the effects of lower grain prices, resulting in a decent year for most. Livestock producers continue to benefit from lower grain prices.

Overall, farmers have become much more conservative with their spending. Debt reduction, building working capital and cutting expenses have become the emphasis versus buying capital items or real estate. We have seen some reduction in land rents and expect to see further reductions.

Going forward, we recommend farmers be knowledgeable about their cost of production, and obtain assistance with their grain marketing and forward contracting if needed. Operations should be scrutinized for expenses that can be reduced or eliminated. Additionally, on balance sheets, debt structure should match the purpose of the loan or the asset securing the debt. As always, farmers should consider building working capital and fixing the interest rate on any borrowed funds with terms longer than a year.