OUTLOOK

ECONOMIC DATA AND COMMENTARY

June 2018 • Volume 15 • Number 5

Asset Values & Rising Interest Rates

In mid-May, mortgage interest rates hit their highest level in seven years, prompting one official from the Federal Home Loan Mortgage Corporation (Freddie Mac) to declare "a regime shift in the way the market is thinking about rates." While that news applied specifically to real estate, the Federal Reserve has indicated it will raise its key federal funds rate this month (and again later in the 2018) in response to an overall economy hitting on all cylinders, with low unemployment, strong corporate earnings and a robust if volatile stock market.

In economics, good news rarely comes without worries and potential downsides. At what point will a hot economy overheat? And if the Fed feels compelled to accelerate rate hikes to keep inflation from spiking, could that damage the outlook for assets ranging from stocks to commodities to residential and commercial land?

David R. Kotok, chief financial officer of Florida-based Cumberland Advisors, believes such concerns, while understandable, are misplaced. Kotok, who has seen just about every kind of economic and market condition since co-founding Cumberland in 1973, believes the Fed's gradual approach to increasing rates will be enough to keep inflation moderate while allowing growth to continue. He spoke to OUTLOOK about what's ahead for interest rates and for various types of assets, as well as the need to factor in other considerations such as trade tensions and rising U.S. debt.

OUTLOOK: The stock market has continued to advance in 2018 but with much more volatility than last year. What's your outlook for stocks for the balance of 2018?

David Kotok: Stock prices are driven first and foremost by earnings, and the pick-up in earnings momentum that we've seen recently after several flat years, thanks in part to the impact of the new tax law, is remarkable. We had a correction of about 11 percent early this year, and there could be another one. But we believe that after those have run their course, higher stock prices are ahead. Our longer-term strategic target for the S&P 500, for the end of this decade or the beginning of the next, is above 3000.

This Month's Expert

David R. Kotok is chief investment officer and co-founder of Cumberland Advisors, based in Sarasota, Florida. He currently serves as a director of the Global Interdependence Center (GIC), which encourages global dialogue and free trade, and has received the GIC's Global Citizen Award. Kotok is a member of the National Business Economics Issues Council, the National Association for Business Economics and has served on the Research Advisory Board of BCA Research.

Kotok has written or co-written four books, including, most recently, "Adventures in Muniland." Kotok's articles and market commentaries have appeared in *The New York Times, The Wall Street Journal, Barron's* and other publications. He is a frequent contributor to Bloomberg TV and Bloomberg Radio, Fox Business and other media. He holds a B.S. in economics from the Wharton School of the University of Pennsylvania, and M.S. in organizational dynamics and M.A. in philosophy from the University of Pennsylvania.

Volatility is higher now because it's coming back to something more normal – after a long and unusual period of low volatility. That means more downside movements of up to 7 percent and more robust but volatile upside movements. Still, as long as earnings stay on track, the general trend should be for higher stock prices. The market is not expensive or cheap – it's fairly priced, even with higher interest rates ahead.

OUTLOOK: What do you expect from the Federal Reserve in terms of higher interest rates?

Kotok: I expect a policy of gradualism. That means the Fed forecasting what it will do, and then trying to repeat and repeat and repeat that narrative so that it will be believed. Then, it's doing what it said it would do, changing interest rates at a predictable pace without shocks to the market. The Fed under Janet Yellen and now under Jay Powell has been following that principle. In fact, markets are now predicting that, based on the economic data and the very low unemployment rate, the Fed may end up being less aggressive than it's saying it will be. There could be fewer interest rate hikes than expected.

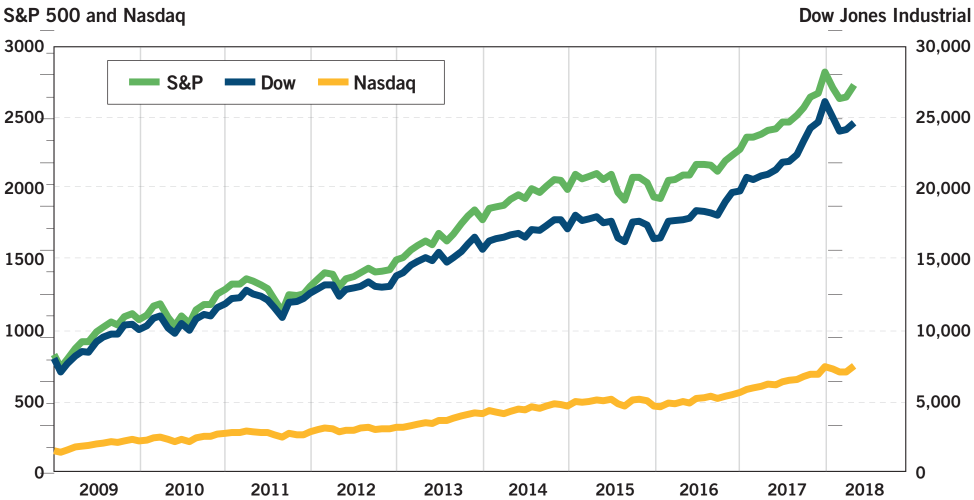
OUTLOOK: Has uncertainty about interest rates had anything to do with the market volatility this year?

Kotok: Absolutely. The markets fear robustly rising interest rates, and they fear aggressively rising inflation that could lead to higher rates. If inflation starts to get close to 3 percent, on a sustainable level, markets will say the Fed must really change its stripes and get aggressive with higher interest rates. That would kill the stock market, slow the economy and hurt sectors that are interest-sensitive, such as housing and mortgage finance. But the markets don't expect that and neither do I.

OUTLOOK: To what extent is the Fed worried about rising prices?

Kotok: In the Fed's most recent statements, from Powell and others, everything seems to be well balanced. Unemployment is low. The economy is growing. Inflation is always a worry to central bankers – they're born with the inflation worry gene – but they seem to think it's reasonably in line. They're articulating a view that I think is correct, because 2 percent to 2-1/2 percent growth, 2 percent inflation and 150,000 new jobs per month are not the kinds of things that derail an economy. The Fed doesn't have a reason to hike interest rates robustly. It has a reason to try to return to normalcy.

STOCK MARKET INDICES 2009-PRESENT



Source: Knowledge Exchange Division, CoBank, ACB

OUTLOOK: Do you see anything that hints of higher inflation?

Kotok: A few things could be worrisome. When labor markets tighten, that puts upward pressure on prices, and that's starting to happen, though how tight labor markets really are is debatable. We see some evidence of tightening in the service sector, for health care workers, in hospitality-related areas and in transportation, where new rules on truckers have them logging their time electronically. That has led to a shortage of drivers and that is starting to push wages higher. There's also a mismatch of skills. There are now 6-1/2 million U.S. job openings – a new high – and they're not being filled because people don't have the skills.

On the other hand, we're starting to see people who were on disability returning to the labor force, and there's a rising labor-participation rate in people over 50. When I travel around the country, I see growing numbers of these folks who want to come back to work. And they're being recruited and hired, because the unemployment rate is low and because 20- and 30-year-olds aren't aggressively seeking those jobs. Somebody has to fill them. And having a growing cohort of people leaving retirement or disability adds to productivity and dampens employment volatility.

OUTLOOK: Looking beyond inflation, are there other things the Fed is watching?

Kotok: I think the Fed also kind of worries about real estate bubbles, and we hear little noises about excesses or developing excesses in real estate. The memories of a real estate-induced financial crisis are fresh. That happened just 10 years ago, and the Fed doesn't want another crisis. It doesn't want systemic risk. But my sense is that while the Fed may be wary, it's not ready to change policy. My view as an investor, a money manager and a consultant for institutional investors is that it's more important to look at what the Fed does than what the Fed says. It's how the feet move that counts. Don't get caught up in the rhetoric.

> “The memories of a real estate-induced financial crisis are fresh”

OUTLOOK: What happens to bond yields and prices in today’s interest rate environment?

Kotok: Because interest rates are so low elsewhere in the world, U.S. government bonds continue to be popular with international investors, and that helps keep prices up and interest rates down. Europe is still in negative interest rate territory. If the German 10-year security, denominated in euros, yields 200 basis points less than the U.S. benchmark bond, money moves to dollars and U.S. bonds. As long as European interest rates stay very low, which is likely for a while longer, they will act as a downward force on the yields of U.S. notes and bonds. Not on shorter-term rates, which the Fed can put anywhere it wants. But on intermediate and longer-term rates.

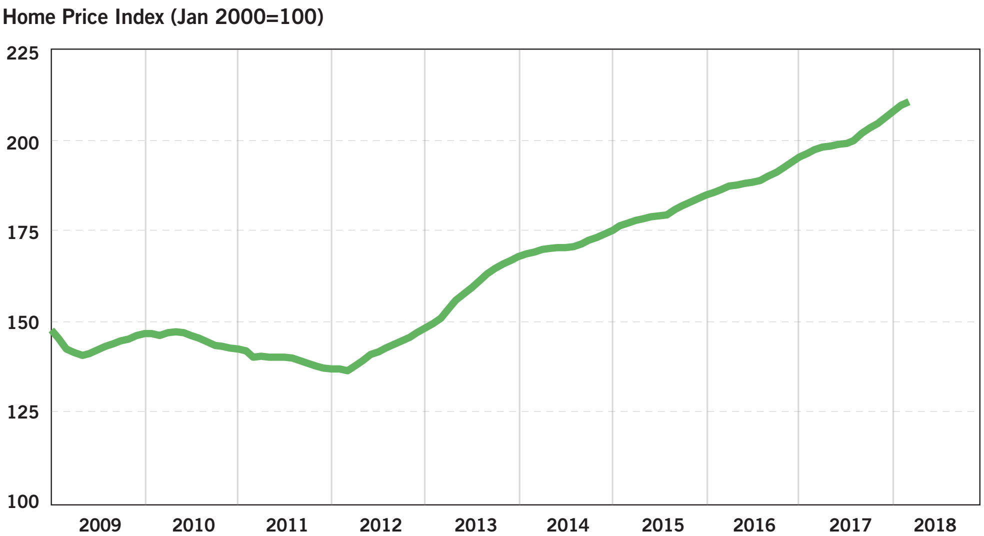
OUTLOOK: When bond rates do move higher, what will that mean for bondholders? Will retirees benefit from greater income from their bonds?

Kotok: That’s what we say to our clients. If you are a patient investor with a long-term time horizon and there’s a gradual rise in interest rates, then the higher coupon payment on your bonds more than compensates for your market exposure to the lower bond prices that result from rising rates.

OUTLOOK: What is the relationship between interest rates and the dollar? How would a stronger dollar affect U.S. agriculture and other U.S. export industries?

Kotok: If you’re selling, you want the other guy to buy from you at a bargain price. If you’re buying, you want to pay the lower price. So if the dollar is stronger and you’re importing Bordeaux from France, you like it. But if you’re selling an agricultural commodity and the other side has to come up with more of some other currency to buy yours, you don’t like it. That’s the trade-off in the currency area. We’re watching that happen as the dollar strengthens. Then you get shocks from trade negotiations like what happened with pork. China says it’s going to retaliate on pork imports. If you’re a pig farmer in Iowa, you don’t like that.

HOME PRICE INDEX FROM 2009-PRESENT



Source: Knowledge Exchange Division, CoBank, ACB

OUTLOOK: How will rising rates affect housing values?

Kotok: At the margins, higher rates keep some buyers from making a purchase, because their income is no longer adequate to qualify for a mortgage. Changes in mortgage interest rates are driven by changes in U.S. Treasury interest rates, and that affects the demand for, and sales of, new and existing houses. Mortgage rates now have been low for so long that almost all U.S. mortgages have already been refinanced. We are now in a climate in which there's no longer that refinance kick to housing. So instead housing prices have to be driven by demographics, the income levels of purchasers and the ups and downs of mortgage interest rates, which affect the marginal buyer. We are now back to those basics, after almost a decade of the refinance boost.

OUTLOOK: What's the outlook for residential real estate over the next year or so?

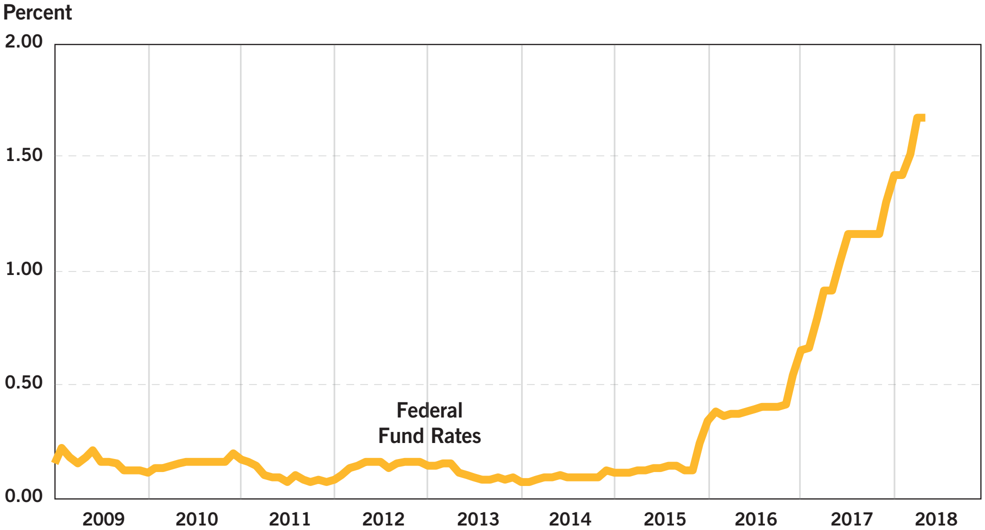
Kotok: Moderate. There seems to be a bit of a shortage of housing, but depending on where you are in the country, there also seems to be a lot of construction. Here in Florida I see a huge construction boom taking place at the high end in condos that sell in the millions and the lower end where people can buy a house with a Fannie Mae qualified mortgage and in the mid-rental market. We have cranes in the air everywhere.

OUTLOOK: How do rising rates affect land prices for agriculture or other land-sensitive industries?

Kotok: In industries that are interest-sensitive, it's simple – the higher the rate, the further down prices go. That's true whether it's agriculture, finance, utility stocks or any other industry that's interest-sensitive. We are in a period where the outlook is for interest rates to rise gradually over time, and that means a headwind for interest-sensitive sectors. In our stock portfolios, we underweigh those sectors.

But agricultural land prices aren't tied only to interest rates. Commodity prices for what's grown on that land also come into play.

FEDERAL FUNDS RATE 2009-PRESENT



Source: Knowledge Exchange Division, CoBank, ACB

OUTLOOK: What about commodities? What happens to their prices when interest rates rise?

Kotok: In the short term, there's little impact. Longer term, if interest rates rise sustainably, that will affect commodities because it changes the cost of capital dramatically for commodity producers.

A commodity producer can't change direction quickly. If you have a gold mine or a copper mine, you have people and equipment for mining gold or copper. That's really the same for any commodity. If it's an agricultural commodity, it takes capital to farm it. The structure of commodity production can't respond to a very short-term change in interest rates.

But interest rates do affect the cost of carrying inventory. If interest rates go up, that cost increases, and if rates are headed constantly higher, producers are going to cut back on inventory. That means more commodities will hit the market, changing the supply and demand balance.

This goes on all the time. But if interest rates don't go up dramatically, there should be no spike in commodity prices. If there's gradualism and the Fed explains what it's doing and the policy is repeated and repeated, the person who's producing the copper says, "Okay. My inventory financing cost is going to be a quarter or half a point higher six months from now. I can figure out how to manage that." That's how I see the interface between commodities and interest rates.

OUTLOOK: What if inflation rises despite the Fed moving interest rates higher? What are the Fed's other options for slowing the rise in prices?

Kotok: In the short run, the Fed doesn't have many other options because it has already committed itself to a path to higher short-term interest rates, and to shrinking its balance sheet by reducing the Fed's big holdings of federal securities. The Fed is already on that path, and if it did anything to change that path, it would risk shocking the markets. Absent deflation, disinflation or some external shock, the Fed won't want to ease off that path. I expect it will hike rates twice more, or maybe three times, taking short-term rates 50 or 75 basis points higher, to 2.25 percent to 2.5 percent for the federal funds rate.

> We also have an annual federal budget deficit that will move from $500 billion to $1 trillion within two to three years"

OUTLOOK: Overall, as interest rates move higher, what are the implications for investors and for the economy?

Kotok: It really depends on what shocks we encounter. We can identify what those might be. It will be a shock if oil prices go to $140. Or a trade war with China that dampens economic activity – that's a shock. Or a shooting war.

We also have an annual federal budget deficit that will move from $500 billion to $1 trillion within two to three years, which means the United States will issue a large amount of new debt in the form of Treasury bills, notes and bonds. At the same time, the Federal Reserve is on a pathway to shrink its balance sheet, and that means disgorging to the market $400 billion or $500 billion, on a schedule the Fed has published. Is there a collision coming in how the worldwide market digests an extra $1 trillion in U.S. government securities? The answer is, we don't know. That's a risk. That's a potential shock. There will be very little warning if that happens with a negative effect.

But if gradualism prevails, if there's no trade war shock and the transition of the federal deficit to a larger number and the shrinkage of the Fed's balance sheet all happen without a collision, we can have higher stock prices, economic growth, gradually increasing asset values and rising incomes, and the Fed's benign, gradualistic approach to our economy, markets and our situation can continue for several more years. I think we can have a very long sweet cycle if we don't get one of those shocks.

Interest Rates and Economic Indicators

The interest rate and economic data on this page were updated as of 5/31/18. They are intended to provide rate or cost indications only and are for notional amounts in excess of $5 million except for forward fixed rates.

KEY ECONOMIC INDICATORS

Gross Domestic Product (GDP) measures the change in total output of the U.S. economy. The Consumer Price Index (CPI) is a measure of consumer inflation. The federal funds rate is the rate charged by banks to one another on overnight funds. The target federal funds rate is set by the Federal Reserve as one of the tools of monetary policy. The interest rate on the 10-year U.S. Treasury Note is considered a reflection of the market's view of longer-term macroeconomic performance; the 2-year projection provides a view of more near-term economic performance.

ECONOMIC AND INTEREST RATE PROJECTIONS

Forecasts courtesy of Bloomberg and Blue Chip Economic Indicators

				US Treasury Securities	
2018	**GDP**	**CPI**	**Funds**	**2-year**	**10-year**
Q2	3.20%	2.00%	1.82%	2.52%	3.00%
Q3	3.00%	2.30%	1.94%	2.66%	3.10%
Q4	2.80%	2.00%	2.15%	2.79%	3.18%
2019	**GDP**	**CPI**	**Funds**	**2-year**	**10-year**
Q1	2.50%	2.20%	2.27%	2.92%	3.26%
Q2	2.50%	2.20%	2.38%	3.02%	3.32%

PROJECTIONS OF FUTURE INTEREST RATES

The table below reflects current market expectations about interest rates at given points in the future. Implied forward rates are the most commonly used measure of the outlook for interest rates. The forward rates listed are derived from the current interest rate curve using a mathematical formula to project future interest rate levels.

IMPLIED FORWARD SWAP RATES

Years Forward	3-month LIBOR	1-year Swap	3-year Swap	5-year Swap	7-year Swap	10-year Swap
Today	2.37%	2.55%	2.82%	2.89%	2.92%	2.92%
0.25	2.48%	2.66%	2.87%	2.90%	2.91%	2.91%
0.50	2.60%	2.76%	2.92%	2.91%	2.93%	2.93%
0.75	2.76%	2.87%	2.95%	2.96%	2.98%	2.98%
1.00	2.79%	2.92%	2.95%	2.94%	2.96%	2.96%
1.50	2.91%	2.96%	2.99%	2.99%	3.01%	3.01%
2.00	2.93%	2.97%	2.96%	2.96%	2.98%	2.98%
2.50	2.93%	2.96%	2.95%	2.97%	2.99%	2.99%
3.00	2.93%	2.96%	2.95%	2.98%	3.01%	3.01%
4.00	2.92%	2.96%	2.97%	3.00%	3.03%	3.03%
5.00	2.94%	2.96%	2.99%	3.05%	3.03%	3.03%

HEDGING THE COST OF FUTURE LOANS

A forward fixed rate is a fixed loan rate on a specified balance that can be drawn on or before a predetermined future date. The table below lists the additional cost incurred today to fix a loan at a future date.

FORWARD FIXED RATES

Cost of Forward Funds

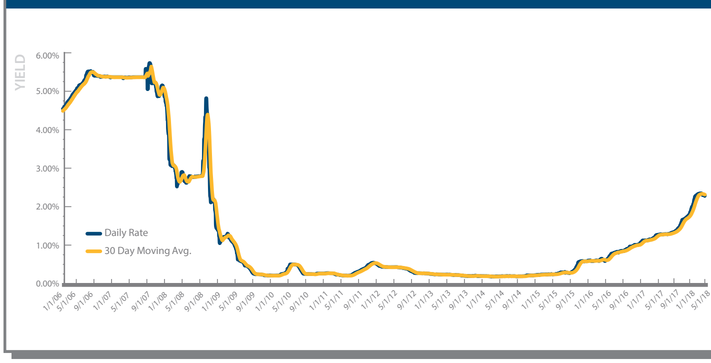
Forward Period (Days)	Average Life of Loan			
	2-yr	3-yr	5-yr	10-yr
30	5	5	5	5
90	8	8	6	6
180	14	13	10	10
365	30	24	21	19

Costs are stated in basis points per year.

SHORT-TERM INTEREST RATES

This graph depicts the recent history of the cost to fund floating rate loans. Three-month LIBOR is the most commonly used index for short-term financing.

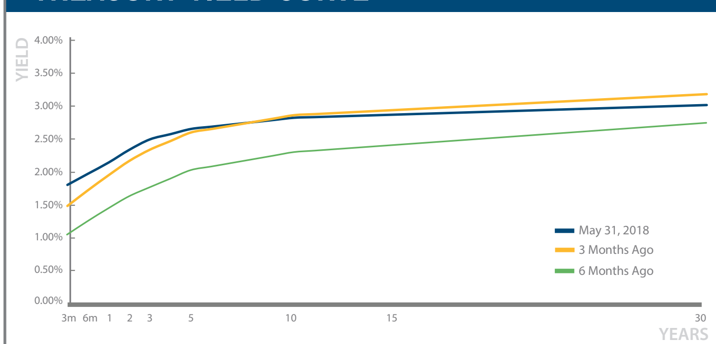
3-MONTH LIBOR



RELATION OF INTEREST RATE TO MATURITY

The yield curve is the relation between the cost of borrowing and the time to maturity of debt for a given borrower in a given currency. Typically, interest rates on long-term securities are higher than rates on short-term securities. Long-term securities generally require a risk premium for inflation uncertainty, for liquidity, and for potential default risk.

TREASURY YIELD CURVE



COBANK UPDATE

The 2018 Farm Bill

By Brian Cavey, Senior Vice President, CoBank Government Affairs

Last month history repeated itself in the House of Representatives. On May 17, 2018, as on June 20, 2013, the House of Representatives voted against the Farm Bill. After months of hard work, the leaders of the House Agriculture Committee were finally able to move the bill across the finish line. It looks like we will need all that effort and more this time around. More on that effort in a bit; first, some information about the Farm Bill itself.

What the Farm Bill Means to CoBank

Every four to five years, Congress passes a piece of legislation called the Farm Bill, setting federal agricultural and rural economic policy. The Farm Bill is a large package, typically addressing programs for crop insurance, conservation, agricultural trade, domestic nutrition programs, rural economic development, research investment and many other programs vital to the agriculture industry, rural communities and those who benefit from a safe, abundant and affordable food supply – *All of Us!*

Background and Next Steps

The House started the process moving their bill through the Agriculture Committee in early May and taking it to the House Floor the next week. Unfortunately, the 198-213 vote was 15 short of passage. The House will attempt to pass the Farm Bill with another vote on June 22. That will need to draw additional votes from Republicans as the Supplemental Nutrition Assistance Program ("SNAP") changes have stirred unanimous Democratic opposition. Meanwhile, the Senate Agriculture Committee is trying to reach bipartisan agreement on a bill they propose to publish on June 7, consider in Committee on June 13, and move through the full Senate soon thereafter.

While we don't have the Senate's bill language yet, the titles will be similar to the current House bill. Each major section or Title of the bill addresses policies under that umbrella, usually reauthorizing and reforming the existing laws, some of which date to the Great Depression. CoBank is very interested in several of these titles for our work and that of our customers. For example, we are concerned about threats to the commodity programs that many Farm Credit customers rely on. The sugar program is a perennial target for elimination and this year was no different. An amendment from North Carolina's Representative Virginia Foxx (R-NC-5) was handily defeated with Farm Credit throwing its weight against this amendment.

House reforms of the Conservation Title, investments to promote voluntary, locally led and incentive-based programs, promoting healthier soils, air, water and enhancements to wildlife and habitat drew the ire of environmentalists when $800 million was cut. Programs like the EQIP program in the Conversation Title assist producers to implement improvements on their farm to protect the environment.

While changes in the title on trade are modest, there is great interest in this topic given the tariff announcements made by the Trump administration, the ongoing effort to renegotiate NAFTA and the retaliatory tariffs announced by our trade partners. U.S. agriculture is a trade success story and continuing low prices mean we should be working to open more markets, not damage those we already serve.

Critical Elements and Potential Threats to Passage

Farm Credit is authorized under the Farm Credit Act. Each Farm Bill we strive to prevent any reduction or unwanted revision to our lending authority. The House Bill's Credit Title supports Farm Credit's ability to provide much-needed capital in rural communities.

The Rural Development Title provides investment in rural communities to improve economic development, electric service, broadband access and services to help provide safe and affordable water to rural communities across the country.

Titles on research and horticulture are important to many CoBank customers and to the Land Grant Universities that serve agriculture and rural communities. The U.S. Forest Service is governed via policies addressed in the Forestry Title, a big issue for those states hosting large National Forest acreage.

For our customers, the Crop Insurance Title is vital to many Farm Credit customers. This is a critical component for farmers and ranchers to manage their risk. Efforts to reduce the federal support of crop insurance unite opponents on the left and the right of the political spectrum. In order to participate in the crop insurance program, producers must buy into the program. For most farmers, crop insurance is required in order to obtain financing. This makes crop insurance vital to farmers everywhere, but also our business model in order to fulfill our mission of serving agricultural needs across the country.

About CoBank

CoBank is a $133 billion cooperative bank serving vital industries across rural America. The bank provides loans, leases, export financing and other financial services to agribusinesses and rural power, water and communications providers in all 50 states. The bank also provides wholesale loans and other financial services to affiliated Farm Credit associations serving more than 70,000 farmers, ranchers and other rural borrowers in 23 states around the country.

CoBank is a member of the Farm Credit System, a nationwide network of banks and retail lending associations chartered to support the borrowing needs of U.S. agriculture, rural infrastructure and rural communities. Headquartered outside Denver, Colorado, CoBank serves customers from regional banking centers across the U.S. and also maintains an international representative office in Singapore.

For more information about CoBank, visit the bank's web site at www.cobank.com.

The Nutrition Title authorizes domestic food assistance programs for those in most need across the country, and authorizes programs for fresh fruits and vegetables and other healthy foods. This title has been important in the past to gain the support of urban and suburban legislators for the Farm Bill. The House changes to SNAP have made this year's effort a partisan struggle. Democrats and some moderate Republicans are distressed by the increase in work requirements for nutrition program recipients and a new bureaucracy will limit any savings generated from the reforms. While CoBank is not engaged in this specific issue, it poses a threat to the bill in the House. The Senate will take a different path on nutrition to make this a more popular bipartisan bill.

Continuing the Work on this Important Measure

The farm programs need to be reauthorized by September 30. As a result, Congress has a big task to face in the next four months. And we will be looking to our customers and associates to lend their help to show support when the House and Senate continue their work on this important measure.