CoBANK

OUTLOOK Economic Data and Commentary

January 2015 Volume 12 Number 1

# Outlook for the Global Oil Market



Over the past several months, U.S. consumers and businesses have been pleasantly surprised by sharply decreasing oil and gasoline prices. Since June of last year, the price of crude oil, which is refined to produce gasoline and a host of other products, has declined about 50 percent from over $100 per barrel to about $50 at the beginning of January. Correspondingly, U.S. gasoline prices now average less than $2.25 per gallon.

While the benefits of cheaper oil and gasoline are generally easy to see – more disposable income for consumers and lower production costs for industry – the causes are more complex. Several factors – such as booming global oil production, slowing demand and increasing vehicle fuel efficiency – have fostered the current environment.

To explain why oil and gasoline prices have decreased so rapidly and what we might expect to happen in the coming months and years, *OUTLOOK* recently sat down with Greg Priddy of the Eurasia Group, a global political research and consulting firm. Priddy specializes in political risk issues that can affect oil market dynamics.

***OUTLOOK: Help us understand the recent history of the global oil market. What has been going on over the past few years?***

**Greg Priddy:** There was a big run-up before the recession when prices for Brent crude – which is a major global price benchmark for oil – moved to about $140 per barrel. They dropped dramatically during the recession and recovered for about two years afterwards. Over the past four years, though, prices have been relatively stable. There were a few fluctuations, but the yearly averages have actually been quite consistent, remaining in roughly the $110 to $120 per barrel range.

Interestingly, several conflicting market forces came together to create that price stability. One was the shale oil boom playing out in the U.S., which added to production growth. There was also much lower yearly demand growth driven largely by consumer lifestyle changes that were made as a result of the recession.

However, what normally would have been an accumulation of supply and downward price pressure was offset by a series of politically driven events

**About this article**

Greg Priddy is director, global energy and natural resources at Eurasia Group, a leading global political risk research and consulting firm. Priddy focuses primarily on the global oil market and issues that affect strategic decision-making. This includes political risk issues that can affect oil prices, cartel politics, and market fundamentals, as well as resource nationalism, environmental regulation, and trade patterns.

Prior to joining Eurasia Group in 2006, Priddy worked for seven years at Z, Inc., a small consulting firm that works with clients in the Energy Information Administration at the U.S. Department of Energy. While there, he contributed to country analysis briefs and was involved in internal U.S. government analyses of oil market risks. Priddy has provided commentary on major media outlets such as CNBC, Bloomberg, CNN, BBC, and PBS NewsHour.

Priddy holds both a bachelor's and master's degree in international affairs.

overseas. Libya had its civil war in 2011 and then U.S. sanctions against Iran were implemented in 2012 just as Libyan production resumed. Libya went offline again in mid 2013. If you put all of that together – along with some other unplanned production outages in Iraq, Syria, and Sudan – it counter-balanced what would have been a very well-supplied or over-supplied market.

The Organization of Petroleum Exporting Countries (OPEC) could potentially have stepped in and implemented lower crude oil production quotas. OPEC is composed of 12 countries that together produce about 40 percent of the world's crude oil. Their goal is to collectively manage their crude oil production, which can significantly affect global oil prices.

However, over the past several years, individual member interests have outweighed OPEC's broader agenda and reaching a consensus for lower collective production limits hasn't been possible.

***OUTLOOK: Where do things stand now?***

**GP:** The question at the beginning of 2014 was: Is demand strong enough to offset what is likely to be more than half a million barrels a day in supply capacity growth?

The short answer was 'no' and since last summer prices have decreased to about $50 per barrel. As recently as a year ago, nobody – including me – expected that to happen. However, it's not surprising in hindsight. Global crude oil production in 2014 simply didn't decrease enough to match the excess of supply over demand.

***OUTLOOK: The U.S. is a car-centric, oil-dependent society. How is it that demand growth is decreasing?***

**GP:** Some of the weakness in demand growth is structural. For example, it's being driven partly by turnover in the vehicle fleet. With enhanced U.S. fuel efficiency requirements, cars are simply using less gasoline.

It's also being driven by what we see as lasting shifts in consumer behavior. After the big price run-up in 2008 and the decline in the median household income from the recession, many households lived under much tighter financial constraints and began driving less. People now live closer to work, and they also figured out that you don't have to go to Walmart every weekend if you have to drive 20 miles each way. You could just go once or twice a month and you've saved some money.

We think that those shifts in consumer behavior – around higher fuel prices and lower incomes – are very sticky, and will survive even when incomes potentially begin to rise.

> Some of the weakness in demand growth is structural. It's also being driven by what we see as lasting shifts in consumer behavior.

I think income distribution is also an issue. Most of the wealth and wage gains from the recovery have gone to people in the top 5 or10 percent – the highly paid professionals. That's an income segment where driving is not at all price sensitive. However, households closer to the median income level – which far outnumber those at upper incomes – are still getting pinched.

***OUTLOOK: How is demand looking in the rest of the world?***

**GP:** You're seeing some of the same dynamic in many places around the world. However, the effect in Asia has been much more that governments could no longer subsidize consumption when the prices ran up in 2007 and 2008 – they started relaxing their subsidies. That also has had an impact on the growth in consumption in some of the emerging markets, slowing it below what it otherwise would have been.

***OUTLOOK: Over the past several months, prices have moved from about $115 per barrel to around $50. What has driven such enormous price volatility?***

**GP:** Three things happened in very short succession. First, it turned out that there was essentially no volume loss from Iraq when the ISIS (Islamic State in Iraq and Syria) events played out in mid to late June. The market had priced for an unsettled situation, anticipating that ISIS could affect production in Southern Iraq as it had in the north, but they didn't.

The second reason was an unexpected and very rapid resumption of large scale exports from Libya in July. In the first half of the year, most oil traders weren't even thinking about Libya. They assumed it was a failed state and it wasn't going to export very much oil. But a sudden political realignment had the effect of incentivizing the people who had taken control of the export terminals in the middle of 2013 to reopen them. Parliamentary elections in July placed those people in the political majority and exports were allowed to go forward.

The third reason for the decline in prices was the Saudis' decision on October 1 to cut their November official selling prices for Asia. Their aggressive pricing led many people in the market to assume that the Saudis were simply trying to gain market share and abandoning their past behavior of cutting production to balance the market.

> Our view is that the Saudis are playing chicken with the market right now and trying to impact investment in U.S. shale production.

**BRENT CRUDE OIL PRICE PER BARREL**


*Source: NASDAQ*

***OUTLOOK: Help us understand the Saudis' strategy.***

**GP:** Our view is that the Saudis are playing chicken with the market right now and trying to impact investment in U.S. shale production.

I think there is an incentive for the Saudis to allow prices to fall and to plant fear in the minds of people investing in shale, essentially to affect capital expenditure decisions on higher cost acreage and slow the rate of supply growth a bit.

***OUTLOOK: How low can they let prices fall?***

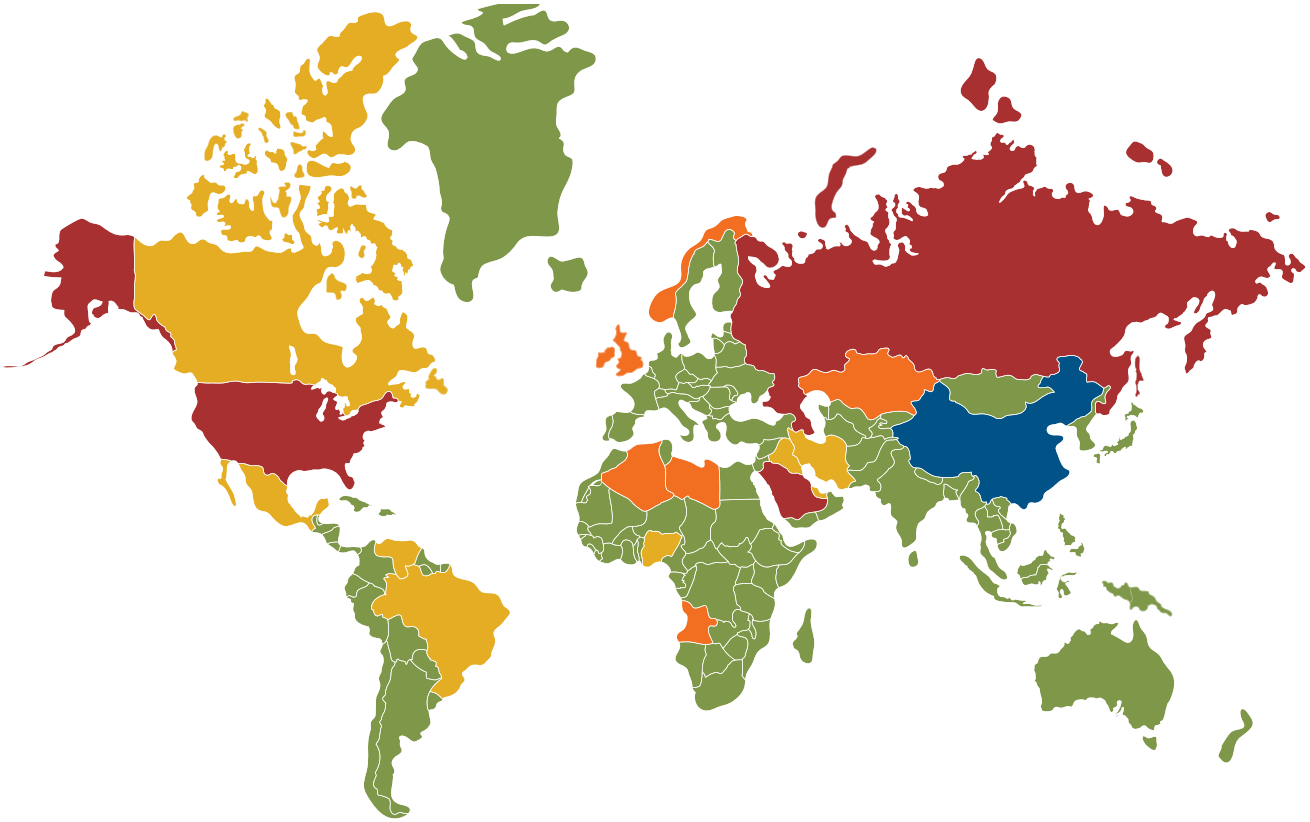
**GP:** The problem for the Saudis is that U.S. shale production costs range from as low as $40 per barrel to close to $100 per barrel, depending largely on investments in acreage. Given such a wide range in costs, they would have to go down to a very low price level to have a significant affect on shale.

Of course, the Saudis have a lot of cash on hand and they could simply weather the storm and continue their government spending out of cash reserves versus future oil revenues. However, they would be burning down their reserves at a very high rate. If the market went below $50 a barrel and then came back up to $70 over the next two years, it would be like a slow-motion train wreck.

I think the Saudis are going to try to equilibrate the market over the medium term – the next couple of years – by working independently of OPEC and trying to cut back output slightly. They'll aim for prices in a range that will begin to cool shale growth a bit – which I think is already happening.

It's an uncomfortable time for everyone, but at the end of the day, I think they will try to manage the transition to a new price equilibrium rather than let it play out abruptly.

## GLOBAL OIL PRODUCING COUNTRIES



2012 WORLD OIL PRODUCTION
(millions of barrels per day)

| | |
|---|---|
| >10 | Russia (10.40) Saudi Arabia (11.73) United States (11.12) |
| 4-7 | China (4.4) |
| 2-4 | Brazil (2.7) Canada (3.9) Iran (3.5) Iraq (3.0) Kuwait (2.8) Mexico (2.9) Nigeria (2.5) Qatar (2.0) United Arab Emirates (3.2) Venezuela (2.5) |
| 1-2 | Algeria (1.9) Angola (1.8) Kazakhstan (1.6) Libya (1.5) Norway (1.9) United Kingdon (1.0) |
| <1 | 204 Countries |

*Source: U.S. Energy Information Administration*

***OUTLOOK: What about OPEC? There doesn't seem to be much, if any, consensus right now to support prices at certain levels.***

**GP:** OPEC lacks cohesion at this point. The last time OPEC cut production in a cohesive way was during the recession in 2008 and 2009 when Brent crude prices went below $50 per barrel. The market was in free-fall to a much greater extent than it is now. At that point, some of the countries that normally don't comply with production quotas had cut their production because they were scared the Saudis would simply pursue a strategy to take market share.

Once that was over and the market started to recover in the second quarter of 2009, most of that external compliance outside of the Saudis essentially went away except for some of their close partners, such as Abu Dhabi, Kuwait, and Qatar, which tend to partner with the Saudis. Since then, OPEC has adopted a group quota of 30 million barrels a day, but there are no individual country allocations under it. I expect any production restraint to come only from this core group of four countries.

As a result of their dysfunction, at their most recent meeting in November, OPEC members did not agree to any production cuts, which caused prices to drop even further.

> The Saudi-Iran dynamic is a key barrier to consensus within OPEC.

***OUTLOOK: Iran – which is an OPEC member – is currently under U.S. economic sanctions because of its nuclear program. How is that playing out within OPEC and the broader marketplace?***

**GP:** The Saudi-Iran dynamic is a key barrier to consensus within OPEC. The U.S. sanctions already have forced Iran to cut production in a way that has helped to offset the U.S. shale boom and helped support a higher market share for the Saudis. The Iranians not only wanted agreement from OPEC that excepted them from additional production cuts, but also recognition of their right to retake market share if sanctions are lifted or begin to fray. The Saudis were never going to support that and it was one of the factors that stood in the way of any consensus.

***OUTLOOK: Help us understand the ongoing nuclear negotiations with Iran and how they could potentially affect the oil market.***

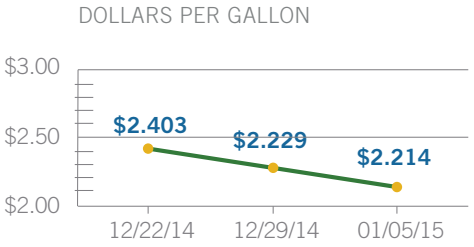
**GP:** The U.S. sanctions – which strictly limit Iran's oil exports – remain in place. The deadline for negotiations was recently extended until June 2015.

Iran, of course, is eager to export more oil to help its economy, which is looking at enormous budget deficits in 2015. Iran currently produces about 2.8 million barrels a day. Their oil minister has said they would increase to 4 million if sanctions were lifted, although there are doubts that such an increase is possible given the country's poor infrastructure. A U.S.-Iran deal that included sanction relief, however, could lead to modestly higher supply. It would probably be phased in over time based on implementation of the deal, rather than all at once.

***OUTLOOK: What effect will the November elections in the U.S. have on the U.S.-Iran negotiations and the prospects that oil sanctions on Iran will be lifted?***

**GP:** It's possible that the new, Republican-dominated Congress will reintroduce the sanctions legislation that was introduced last summer. That bill was stopped on the basis that we needed to give the negotiations time to succeed. If a bill passed and new sanctions were implemented – which is still a big question – they could further reduce Iranian exports.

## U.S. REGULAR GASOLINE PRICES




*Source: U.S. Energy Information Administration*

***OUTLOOK: Restrictions on exporting crude oil from the U.S. have been in place since the mid-1970s, but some companies now want those restrictions lifted. Even in the current environment, wouldn't that cause an increase in U.S. gasoline prices?***

**GP:** Actually, no. The amounts of crude that could be exported from the U.S. wouldn't affect the supply chain enough to cause an increase in gasoline prices. The issue of U.S. exports is really about perception – most American consumers believe that exporting crude oil would raise gas prices here. Those beliefs are based on an incomplete understanding of how the oil market functions but they've created a political reality, which makes it a difficult issue to address. Not unlike immigration reform or healthcare, politicians are reluctant to deal with it because of the fear that it will be used against them in the future.

***OUTLOOK: What do decreasing prices mean for U.S. refiners and the recent shale oil boom?***

**GP:** Several things are at play here. We could see another period of consolidation in the U.S. refining sector. A few years ago, some refineries slated for closure were effectively saved by the shale boom. It offset what would have been a much darker picture for the U.S. refining sector.

But the intent on the Saudis' part is to chill the shale boom rather than kill it. They will not allow a full-on collapse in prices to play out in a way that would stop shale growth in its tracks. It would be too painful for them to do that. They want to plant enough doubt in the minds of people managing the industry to slow down the growth of investment in some of the more marginal, high cost areas for shale.

In 2015, people reassessing projects potentially could affect 20 or 25 percent of new shale growth. There is likely to be a lower comfort level with investing in projects that involve higher cost acreage.

***OUTLOOK: How do other risks like fracking bans and safety play into U.S. shale oil production?***

**GP:** For the most part, those issues are already reflected in the cost structure of the industry. The Obama administration has generally pursued a light touch to regulation of fracking and left much of the regulation up to the states. We have not seen anything at the federal level that's been prohibitive.

We have seen some county or city bans on fracking, which have had a marginal impact on the industry but not a pronounced impact. There are only a few places where a substantial amount of good acreage has been put off limits by those restrictions.

***OUTLOOK: How far down do you think prices will go?***

**GP:** Given a degree of Saudi production restraint, as well as lower output from Libya and a tightened sanctions scenario in Iran, we think the full 'flood' scenario will be averted, and prices will begin to recover once the production restraint becomes apparent in Q1. But in the short-term, the downward momentum is strong, and we could definitely go lower even with Brent hovering at about $50.

From the Saudi perspective, letting prices drop precipitously for a brief period of time is not nearly as costly as letting prices become depressed for a couple of years, so I don't think there is necessarily a trigger price at which they cut output, even if I am correct that their intent is to eventually cut. Given that the current angst in the market is all about the notion that there will be no production restraint to smooth out the adjustment, if the Saudis act and eventually disprove that thesis, there could be a pretty swift recovery into the $70s.

***OUTLOOK: In general, how are lower oil and gasoline prices affecting the U.S. economy?***

**GP:** There's a strong inverse correlation between gas prices and consumer confidence. When gasoline prices go down, people are happy. They have more money to spend, and they feel freer to spend it. So the main impact is going to be the income effect – more money for people to spend and a greater willingness to do so.

Lower gasoline prices mean that median households are getting a substantial amount of money back in their pockets. That can only be good for the broader economy.

The negative side is that some local economies that depend on shale will see slower growth and higher unemployment. There is also a less positive outlook for shares of companies that are tied to shale development or some of the suppliers that provide services or equipment. We're already seeing that reflected in prices for those companies.

# Interest Rates and Economic Indicators

*The interest rate and economic data on this page were updated as of 12/31/14. 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

*Source: Insight Economics, LLC and Blue Chip Economic Indicators*

| | | | | US Treasury Securities | |
|---|---|---|---|---|---|
| **2014** | **GDP** | **CPI** | **Funds** | **2-year** | **10-year** |
| Q4 | 2.50% | 0.20% | 0.12% | 0.58% | 2.23% |
| **2015** | **GDP** | **CPI** | **Funds** | **2-year** | **10-year** |
| Q1 | 2.90% | 1.00% | 0.12% | 0.78% | 2.54% |
| Q2 | 2.90% | 2.00% | 0.20% | 1.02% | 2.76% |
| Q3 | 3.00% | 2.10% | 0.38% | 1.27% | 2.93% |
| Q4 | 2.90% | 2.30% | 0.61% | 1.54% | 3.06% |

## 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 | 0.26% | 0.44% | 1.29% | 1.77% | 2.05% | 2.29% |
| 0.25 | 0.31% | 0.63% | 1.48% | 1.90% | 2.12% | 2.34% |
| 0.50 | 0.50% | 0.86% | 1.64% | 2.00% | 2.21% | 2.41% |
| 0.75 | 0.72% | 1.11% | 1.80% | 2.13% | 2.32% | 2.51% |
| 1.00 | 0.98% | 1.36% | 1.96% | 2.24% | 2.38% | 2.54% |
| 1.50 | 1.49% | 1.79% | 2.20% | 2.41% | 2.54% | 2.67% |
| 2.00 | 1.88% | 2.08% | 2.36% | 2.52% | 2.61% | 2.72% |
| 2.50 | 2.10% | 2.25% | 2.47% | 2.60% | 2.68% | 2.77% |
| 3.00 | 2.32% | 2.42% | 2.58% | 2.68% | 2.74% | 2.82% |
| 4.00 | 2.44% | 2.63% | 2.71% | 2.77% | 2.83% | 2.89% |
| 5.00 | 2.62% | 2.72% | 2.79% | 2.87% | 2.89% | 2.93% |

## 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**

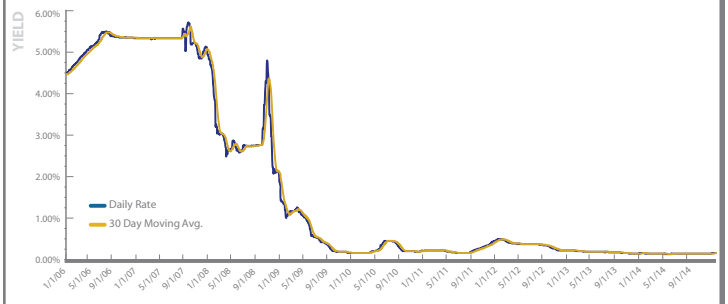
| Forward Period (Days) | Average Life of Loan | | | |
|---|---|---|---|---|
| | 2-yr | 3-yr | 5-yr | 10-yr |
| 30 | 9 | 9 | 7 | 5 |
| 90 | 22 | 20 | 17 | 11 |
| 180 | 41 | 38 | 32 | 21 |
| 365 | 89 | 77 | 64 | 40 |

*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.

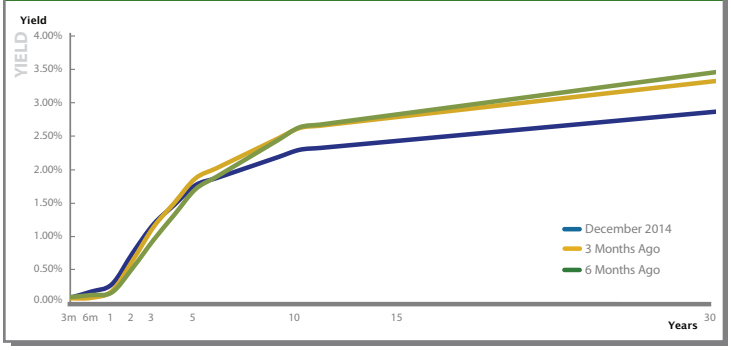
## 3-MONTH LIBOR




## 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 Announces Board Appointments

Bill Farrow and Catherine Moyer have been re-appointed to the bank's board of directors. Both will serve four-year terms ending in 2018.

Farrow, who joined the CoBank board in 2007, is the organizing director, president and CEO of Urban Partnership Bank, a commercial bank in Chicago, Illinois. He is also the owner of Winston and Wolfe LLC, a privately held technology development company, and previously served as executive vice president and chief information officer of the Chicago Board of Trade. In addition, he serves on the board of the Federal Reserve Bank of Chicago. He is a trustee of the Illinois Institute of Technology and a director for NorthShore Health Systems.

Moyer, who joined the CoBank board in 2010, is CEO and general manager of Pioneer Communications, a telephone and communications company serving residents and businesses across southwestern Kansas. In addition, she is a director for the Telcom Insurance Group and sits on the Kan-ed Advisory Committee, a government program in Kansas aimed at increasing collaboration between the state's K-12 schools, institutions of higher education, libraries and hospitals. She is also a commissioner with the Kansas Lottery Commission.

"Bill and Catherine each bring unique perspective and professional experience to our board," said CoBank Chairman Everett Dobrinski. "We have benefited tremendously from their contributions as appointed directors over the past several years, and we are delighted they have agreed to continue serving CoBank."

CoBank also announced board officers for the coming year.

Dobrinski, who has been chairman since 2008, will continue in the chairman's role in 2015. He is the owner and operator of Dobrinski Farm, a cereal grain and oilseed farm in Makoti, North Dakota. He is also a member of the board of the Farm Credit Council and previously served as chairman of Verendrye Electric Cooperative. In addition, he is a former director of the Dakota Pride Cooperative and a current member of the board for the North Dakota Coordinating Council for Co-ops. Dobrinski was first elected to the CoBank board in 1999.

Dan Kelley will continue as first vice chairman. A director since 2004, he produces corn and soybeans in a family farming partnership near

**About CoBank**

CoBank is a $102 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 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 and the nation's rural economy.

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.


*Everett Dobrinski*


*Dan Kelley*


*Kevin Still*


*Bill Farrow*


*Catherine Moyer*

Normal, Illinois. In addition, he serves as a director for Nationwide Bank, Nationwide Mutual Insurance, Evergreen FS, Inc., and Midwest Grain LLC, a grain merchandising company. He is also chairman of the Illinois Agricultural Leadership Foundation and is a director for Truth About Trade and Technology, an agricultural trade organization. Previously, Kelley served as chairman and president of GROWMARK Inc., an agricultural and energy cooperative in Bloomington, Illinois.

Kevin Still will serve as second vice chairman. Still is president and chief executive officer of Co-Alliance, LLP, a partnership of five cooperatives supplying energy, agronomy and animal nutrition, producing swine and marketing grain in Avon, Indiana. Still is also chief executive officer and treasurer of Midland Co-op, Inc., IMPACT Co-op, Inc., LaPorte County Co-op, Inc., Frontier Co op, Inc., and Excel Co-op, Inc., which are agricultural retail cooperatives. He is vice president and director of Connexities, LLC, a technology provider, and is president of Still Farms, LLC. Still has served on the CoBank board since 2002.

“I look forward to working closely with Dan, Kevin and the rest of our directors in the coming year,” Dobrinski said. “Our board and executive management team are fully committed to preserving and building the long-term financial strength of the bank so it can continue fulfilling its mission and delivering dependable credit and financial services to our customers.”

CoBank’s board consists of 24 directors elected by customer-owners from six voting districts around the country, as well as between two and five appointed directors.