U.S. Manufacturing – The Need For A Renaissance

The United States employed nearly 20 million factory workers in 1979 – the peak of U.S. manufacturing. By 2010, that number had plummeted by 40 percent. While productivity increases and efficiencies account for much of that slide, so do several decades of job migration to China and other countries where labor and other costs are lower.

The United States is still one of the world’s top manufacturers but our standing is slipping. And the debate over how to increase the number of domestic manufacturing jobs hasn’t produced any simple solutions. Some argue for penalties and rewards to persuade companies to keep jobs local, while some CEOs say their hands are tied with continually rising costs of U.S. labor and, in some cases, the lack of necessary skills at home.

In their new book, “Producing Prosperity: Why America Needs a Manufacturing Renaissance,” (Harvard Business Review Press, October 2012) Harvard Business School professors Gary Pisano and Willy Shih say many business leaders are approaching the manufacturing problem from the wrong angle. They explain how, in many industries, innovation is intricately linked to manufacturing and how our nation’s competitiveness relies on industry rethinking the relationship between their design and production functions.

Shih, who spent three decades in the computing and consumer electronics industry, and Pisano, who has researched and written extensively about the management of innovation and competitive strategy, tell OUTLOOK why Apple won’t make iPads in the United States, why biotech should stay local, and what other industries can learn from the world’s automakers.

OUTLOOK: We often hear that the U.S. doesn’t make anything anymore – that everything comes from China. Is that true? What’s the current state of manufacturing in this country?

Gary Pisano: This idea that everything comes from China is simply not true. The U.S. is the world’s second largest manufacturer. We still make a lot of stuff in this country, but as a percentage of our GDP, manufacturing is way down.
There is a perception that the U.S. imports everything from China because of our large trade deficit with China. But even the trade statistics can be misleading. Take an iPad assembled in China, which uses components from Taiwan, Korea, Europe and the United States. The factory price of that iPad is credited to China because they are the final leg in the process.

**OUTLOOK:** Even if manufacturing isn’t dead in the United States, it has still undergone a decline here. Is the offshoring trend increasing or decreasing?

**Willy Shih:** I think it has slowed down a lot, especially in the last few years. Labor costs have been going up in China by 20 percent to 30 percent a year. As well, a number of companies are evaluating the coordination costs of having their manufacturing in China. This is the overhead associated with communicating and working among separate locations and firms.

You’re even starting to see companies moving manufacturing out of Asia and back to the United States. Caterpillar is one case. However, this type of move back to the U.S. is relatively infrequent.

**OUTLOOK:** What are the odds that meaningful numbers of outsourced manufacturing jobs will return home to the U.S. over time?

**WS:** Many of the assembly jobs that have moved overseas aren’t coming back.

The way markets have evolved, you have a lot of U.S. firms that now say, ‘we’ll throw labor at the problem.’ They’ve substituted labor for capital. An American mobile phone company can ask one factory in China to produce 400,000 handsets a day. And the Chinese factory and Chinese supply networks can mobilize a workforce and accomplish that very efficiently.

Take BYD in China, the largest maker of lithium ion batteries in the world. They’ve hired thousands of young people in China to assemble lithium ion battery cells by hand.

It’s very hard for the U.S. to compete with that – even when we invest in sophisticated manufacturing technology. In the 1980s when IBM first introduced the PC they sourced the dot matrix printer from Epson. Then they decided to make it locally, in Kentucky. They designed a new product called the ProPrinter, which was snapped together with robots. It was a fantastic factory, featured in magazines. The Secretary of Commerce went and showcased this factory. A year later, IBM quietly shut it down. They found that automation doesn’t allow much flexibility. Humans do.
OUTLOOK: Are there other barriers to domestic manufacturing, besides labor costs?

WS: Across many industries, U.S. companies are tied into highly efficient, low-cost supply chains in Asia. Look at hybrid and electric vehicles. Half the manufacturing value-add in the Chevy Volt is in the battery. But the industrial commons – our collective skill sets and production know-how among our suppliers, our workforce, local universities and other regional institutions – for making rechargeable batteries left our shores two decades ago.

A lot of people have said, “Apple should make computers in the U.S.” But all the components are made in China, Japan or Korea. They have developed an efficient supply network to bring those components together.

If you wanted to build iPads in the U.S., you would have to build a very different type of infrastructure in terms of the supply chain. As well, you see design work moving to Asia. Apple engineers spend a ton of time in China, teaching people there to do design work for product industrialization – the process of moving a product into high-volume manufacture. Once manufacturing moves elsewhere, for iPads or any other products, the worry is that, down the road, we lose the design work in the U.S.

OUTLOOK: Overseas manufacturing has resulted in benefits, like cost savings for consumers, and drawbacks, like job losses. What’s the net impact on our economy?

GP: This is a hotly debated issue: Are we better or worse off for sending manufacturing overseas?

We can afford to consume certain products because they’re made efficiently, at a lower cost – things we might not be able to afford if they were made in the United States or Germany.

At the same time, offshoring has hurt where we’ve failed to make investments in skills. When electronics manufacturing moved outside the United States, a lot of engineering went with it. We are not as capable as we used to be, and the world is getting more capable.

WS: Historically, you didn’t need a college degree to work in manufacturing. It was stable employment and paid well. Think of the auto industry. It provided a route to the middle class for millions of workers. But here and elsewhere, as manufacturing becomes more sophisticated, the educational requirements go up as well. You will need computer skills to work on the shop floor.
We come across managers all the time who want to hire but can’t find the people with the requisite skills for their manufacturing environment. 

some advanced tools, you’ll need engineering skills.

We come across managers of U.S. companies all the time who want to hire but can’t find the people with the requisite skills for their manufacturing environment. You walk through some manufacturing facilities in Asia, which make semiconductors, displays, solar displays. They have employees with master’s degrees in engineering operating some of the tools, which cost upward of $50 million each. You’ll be hard-pressed to find that here.

OUTLOOK: How can the U.S. build a more capable workforce?

WS: Education must include skills that specific types of manufacturing require. Workers don’t necessarily have to have a four-year degree. Community colleges and vocational schools can play a big role in this. I think that these schools, as they partner with local industry, can begin to meet the skills needs of today’s companies. We believe government has a role to play in investing in these types of programs.

And workers have to take responsibility for keeping their skills current. I recently reviewed General Motors’ technology center in Bangalore, India. There are 4,000 engineers. They do computer-aided engineering for power trains in cars – computer modeling and design. It’s an essential part of the GM business. The average age of those engineers is 27.

U.S. MANUFACTURING JOBS

In thousands

Source: U.S. Bureau of Labor Statistics
It used to be a given that it was important to keep management close to manufacturing.

In Michigan, the average age of their peers is 47. If you’re 52 and don’t have current skills and get laid off, what do you do? That’s a big problem. I tell all my students, one of the biggest responsibilities you have in your career is keeping your skills current. Go back and take classes from time to time. Constantly read and look for what is at the forefront of your industry.

OUTLOOK: Should industry play a role in building a more highly-skilled workforce?

GP: American companies have to get to a point where they recognize that a highly skilled workforce is a competitive advantage for them. There are many companies today that do make those kind of investments and they see the value in it.

Too many people view manufacturing jobs as a commodity. There is a strategic value to manufacturing locally. You’re closer to research and development, closer to market and you have better logistics.

OUTLOOK: In your book you argue that by moving manufacturing to another location, some firms have lost, or may lose, their competitive edge. Explain.

WS: It used to be a given that it was important to keep management close to manufacturing. When I was at IBM in the 1980s, the engineers in most industries sat close to manufacturing. That closeness enhanced communication and allowed engineers to see what they were and were not able to effectively produce. Companies that outsource manufacturing to achieve cost efficiency pay a hidden price in that regard.

Eastman Kodak is a case in point. In the 1960s and 1970s, Kodak’s profits were in the sale of color film, not cameras. So they let Nikon, Canon, Minolta and a whole range of Japanese companies take over the market for making film cameras. As Kodak let go of its camera business, the capabilities around Kodak’s headquarters in Rochester, New York, for making lenses or shutters and other mechanical components went away. Local suppliers couldn’t survive because there wasn’t enough business.
In 1997 I started working for Kodak in charge of building their digital camera business. The company had built an automated line to build the cameras in Rochester. At the time, I thought it was admirable. As I started studying it, however, I realized it was really hard to assemble digital cameras in New York because the components would have to come from Asia – the lenses, shutter buttons, view finders, electronic sensors, memory cards, rechargeable batteries. The capabilities were with the suppliers, and all of that had been neglected here. As the technology changed, those capabilities were no longer local. That was one of those inadvertent consequences of the letting go what seemed non-strategic at the time.

This has occurred with consumer electronics overall. Many of the fundamental technologies for things like rechargeable batteries started in the U.S., but then production was outsourced to Japan, Korea and then China. And over time, we’ve lost the infrastructure and capabilities to produce consumer electronics.

PERCENTAGE CHANGE IN EMPLOYMENT BY INDUSTRY
November 2007 – November 2011

Sources: U.S. Bureau of Labor Statistics
Too many people view manufacturing jobs as a commodity. There is a strategic value to manufacturing locally.

OUTLOOK: So what factors should firms consider, in addition to cost savings, when choosing where to locate their production site?

GP: First, look at the impact on your ability to continue to innovate. If you move the manufacturing too far from the R&D, do you lose something in terms of your ability to design the product and get it into production? Distance matters.

Second is the logistics. Some companies have underestimated the complexity of a global supply chain. In some markets, in particular high-value markets like precision machined parts for cars, customers want to have the product the next day. When manufacturing is closer, you are better equipped to meet that demand.

WS: Companies also need to consider the maturity of their manufacturing process. The younger the product or production process, the more likely it is to evolve quickly. Companies need to consider how closely linked their designers need to be to manufacturing – how much do they need to know and understand about the production process to continue to accomplish their task and to continue to innovate? The degree to which things are connected or separate is called “modularity.”

OUTLOOK: Give some examples of these dynamics in industry.

WS: In book printing, the process is mature and the author doesn’t need to know the first thing about how to set up the type or physically put the ink on the paper. Some garment manufacturing is completely separable. I give you the fabric, design and instructions and all the manufacturing knowledge is embedded in those instructions. A lot of the high-volume semiconductor business these days is that way. In these industries, outsourcing can make a lot of sense.

On the other end of the spectrum are industries where the manufacturing process is closely linked to design and still evolving rapidly. Biotech drugs are a prime example. Scientists don’t discover something and throw it over the wall to manufacturing. There’s a huge amount of innovation that actually goes on within the manufacturing. There’s a lot of: “How do I get a reasonable yield of this drug at a cost people can afford? How do I make sure it’s not
Simple assembly of products shouldn’t be here in the U.S. Complicated stuff should be. The U.S. is better suited to manufacture things for which labor cost as a percentage of total cost is low.

There’s a huge amount of know-how and learning in this process. Separating out design and manufacturing in industries like that is taking a risk that they will lose a lot of their innovative capabilities.

There are also industries that aren’t really modular even though the manufacturing process is mature. If you look at high-end clothing or wine and other specialty products, there’s tacit knowledge there embedded in the making of the good. With these types of businesses, the process is the product. There are things a vintner may do in a particular way, and they have a sense of why they do it, but it’s not necessarily well-documented. Here, design and manufacturing cannot be separated.

**OUTLOOK: If you keep manufacturing local, how do you get design and manufacturing teams talking in ways that harness the potential for innovation?**

**GP:** You need senior leaders who say, we have to integrate this. We do not tolerate working in silos. The fiefdom mentality that ‘this is my area’ doesn’t work. Often the working-level people are much better at communicating with each other. If they don’t, it’s usually because senior management doesn’t support it.

It helps when you have employees who, throughout their careers, have gained experience in an area of their business other than what they do now. If you have a designer who has never been in a factory, you have a problem. You make bad design decisions. Businesses need people who follow their products into the other functions and understand the problems faced by other departments.

**OUTLOOK: Where is our nation’s opportunity to redefine the manufacturing sector and build the right skill sets to support it?**

**GP:** Simple assembly of products shouldn’t be here in the U.S. Complicated stuff should be. Given high wages, the U.S. is better suited to manufacture things for which labor cost as a percentage of total cost is low. Biotechnology is a good example. We can also do well in labor-intensive industries, such as building aircraft engines, that require a very high degree of worker skill.
I worry about companies that are highly innovative, with low modularity, moving production outside the U.S. We’re seeing this in a lot of biotech. It’s a pretty integrated business, but it’s very attractive from a cost and subsidy point of view to go to Ireland or to Singapore. I know that part of the development world very well. It takes a lot of interaction between the science and manufacturing sides to be successful. This is exactly the kind of manufacturing the U.S. can and should be able to do well.

**OUTLOOK:** What obstacles might a company face when bringing manufacturing back home?

**GP:** These are the same reasons you still see companies moving manufacturing outside the country. No. 1 is the skill set. And it’s also the supplier base. You need the right suppliers and if the suppliers or those people who have maintained the equipment left long ago, it’s hard to have a plant. It’s hard to come back on your own. These things move as chains.

But it can happen. The automotive industry, which moved to the U.S. from Japan, is a success story. Ford and GM and Chrysler are making more cars today in the U.S. than 20 years ago. Many foreign carmakers have plants here. They had to bring their supply chains here. It took time, but they did it.

**OUTLOOK:** What made it – or allowed it to – happen?

**GP:** There was political pressure. Japanese carmakers were eating up the market while market share for General Motors, Ford and Chrysler was plummeting. Protectionism spiked and the Japanese got concerned about getting shut out of the American market.

The companies – Toyota and Honda were among the first – knew it was expensive to ship cars here. They had to bring suppliers here. They imported some components. And they worked with certain suppliers in Japan and elsewhere, companies they had strong relationships with, and those suppliers came to the U.S. and built factories here. Then the Japanese automakers started to work with American suppliers. They’ve been very successful.

Had the U.S. auto industry vanished completely it may have been a lot harder. We had a generation of machinists, skilled managers you could hire.
**OUTLOOK:** You mentioned Caterpillar. Do you have a few more ‘success stories’ of keeping manufacturing local?

**GP:** Corning is a great example. The company has plants all around the world, but it has maintained significant manufacturing capability in the U.S., to exploit linkages to R&D. Cummins is another example.

Also, let me clarify the difference between ‘local’ and ‘domestic.’ By local, we mean connecting your operations to the local workforce. When non-American companies invest in the U.S. and create jobs here, we consider that a success story for keeping manufacturing local. And when we refer to American companies keeping manufacturing local, that does not mean they aren’t doing any overseas manufacturing and sourcing. It just means they are keeping a sufficient manufacturing base in the U.S.

---

**THE PRODUCTIVITY REVOLUTION**

Manufacturing job share vs. manufacturing output (index: 2002=100), 1950-2008

Source: Brian Wesbury, First Trust Portfolios
**OUTLOOK**: What types of public policy would better support U.S. innovation? Is it more important for government to invest in education or to provide businesses with incentives to conduct or pay for training and professional development?

**GP:** Public policy can work at several levels. One is basic education. The U.S. used to have the best primary and secondary education system in the world, but now it lags badly. That must be fixed. As we mentioned earlier, the government can also support more specialized technical and vocational training.

But government can also support scientific research that advances disciplines such as nanotechnology, advanced materials, et cetera – technology that will be key to manufacturing in the future.

**OUTLOOK**: If you were speaking to a group of CEOs of companies that have a manufacturing operation, and they asked what they could do to support U.S. innovation, what would you tell them?

**GP:** I would tell them that they should be exploiting the potential for innovation in their domestic manufacturing operations before they start moving things overseas. There is no natural law that says a U.S.-based manufacturing operation cannot be highly cost competitive, but it does take innovation.

Take a look at your own manufacturing operations and ask yourself if there is not a whole bunch that can be done to improve those through innovation. If they do that, they will not only make their companies better, but they will also make the U.S. a stronger economy.
Interest Rates and Economic Indicators

The interest rate and economic data on this page were updated as of 08/31/12. 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

<table>
<thead>
<tr>
<th>US Treasury Securities</th>
<th>2012</th>
<th>GDP</th>
<th>CPI</th>
<th>Funds</th>
<th>2-year</th>
<th>10-year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td></td>
<td>1.70%</td>
<td>1.60%</td>
<td>0.15%</td>
<td>0.30%</td>
<td>1.60%</td>
</tr>
<tr>
<td>Q4</td>
<td></td>
<td>1.90%</td>
<td>1.90%</td>
<td>0.15%</td>
<td>0.30%</td>
<td>1.80%</td>
</tr>
</tbody>
</table>

| 2013                  |      |     |     |       |        |        |
| Q1                    |      | 1.80% | 2.10% | 0.15% | 0.40% | 1.90% |
| Q2                    |      | 2.40% | 2.00% | 0.15% | 0.50% | 2.10% |
| Q3                    |      | 2.70% | 2.30% | 0.20% | 0.60% | 2.20% |
| Q4                    |      | 2.90% | 2.20% | 0.20% | 0.60% | 2.30% |

IMPLIED FORWARD SWAP RATES

<table>
<thead>
<tr>
<th>Years</th>
<th>3-month LIBOR</th>
<th>1-year Swap</th>
<th>3-year Swap</th>
<th>5-year Swap</th>
<th>7-year Swap</th>
<th>10-year Swap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today</td>
<td>0.43%</td>
<td>0.40%</td>
<td>0.51%</td>
<td>0.84%</td>
<td>1.26%</td>
<td>1.72%</td>
</tr>
<tr>
<td>0.25</td>
<td>0.32%</td>
<td>0.38%</td>
<td>0.55%</td>
<td>0.92%</td>
<td>1.33%</td>
<td>1.79%</td>
</tr>
<tr>
<td>0.50</td>
<td>0.39%</td>
<td>0.41%</td>
<td>0.60%</td>
<td>1.00%</td>
<td>1.42%</td>
<td>1.86%</td>
</tr>
<tr>
<td>0.75</td>
<td>0.40%</td>
<td>0.43%</td>
<td>0.67%</td>
<td>1.10%</td>
<td>1.50%</td>
<td>1.93%</td>
</tr>
<tr>
<td>1.00</td>
<td>0.41%</td>
<td>0.47%</td>
<td>0.74%</td>
<td>1.19%</td>
<td>1.59%</td>
<td>2.00%</td>
</tr>
<tr>
<td>1.50</td>
<td>0.47%</td>
<td>0.53%</td>
<td>0.92%</td>
<td>1.39%</td>
<td>1.76%</td>
<td>2.14%</td>
</tr>
<tr>
<td>2.00</td>
<td>0.54%</td>
<td>0.66%</td>
<td>1.13%</td>
<td>1.63%</td>
<td>1.91%</td>
<td>2.31%</td>
</tr>
<tr>
<td>2.50</td>
<td>0.76%</td>
<td>0.90%</td>
<td>1.38%</td>
<td>1.83%</td>
<td>2.10%</td>
<td>2.43%</td>
</tr>
<tr>
<td>3.00</td>
<td>0.99%</td>
<td>1.13%</td>
<td>1.64%</td>
<td>2.02%</td>
<td>2.29%</td>
<td>2.55%</td>
</tr>
<tr>
<td>4.00</td>
<td>1.49%</td>
<td>1.64%</td>
<td>2.10%</td>
<td>2.39%</td>
<td>2.60%</td>
<td>2.78%</td>
</tr>
<tr>
<td>5.00</td>
<td>2.00%</td>
<td>2.16%</td>
<td>2.48%</td>
<td>2.69%</td>
<td>2.85%</td>
<td>2.96%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Cost of Forward Funds</th>
<th>Average Life of Loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward Period (Days)</td>
<td>2-yr</td>
</tr>
<tr>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>90</td>
<td>5</td>
</tr>
<tr>
<td>180</td>
<td>5</td>
</tr>
<tr>
<td>365</td>
<td>6</td>
</tr>
</tbody>
</table>

Costs are stated in basis points per year.

SHORTH-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.

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

Source: Insight Economics, LLC and Blue Chip Economic Indicators
CoBank Announces Board Election Results

CoBank has announced results of shareholder elections for the bank’s 2013 Board of Directors.

A total of nine seats on the board were open this year due to the transition to the new governance structure adopted as part of the bank’s recently closed merger with U.S. AgBank. The board will now have a total of 24 elected directors from six regions, as well as between three and five appointed directors.

The winning candidates for each open seat are listed in the table below, along with occupation, region, type of seat, residence, and term expiration date. The initial terms for a number of candidates will be for less than the standard four years in order to accommodate term staggering:

<table>
<thead>
<tr>
<th>REGION</th>
<th>SEAT TYPE</th>
<th>NAME</th>
<th>OCCUPATION</th>
<th>RESIDENCE</th>
<th>TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td>One-member-one-vote</td>
<td>James Kinsey</td>
<td>Owner/operator of a purebred Angus seed-stock operation</td>
<td>Flemington, WV</td>
<td>2016</td>
</tr>
<tr>
<td>South</td>
<td>One-member-one-vote</td>
<td>George Kitchens</td>
<td>GM &amp; CEO, Joe Wheeler EMC</td>
<td>Decatur, AL</td>
<td>2013</td>
</tr>
<tr>
<td>South</td>
<td>Modified equity</td>
<td>Robert Behr</td>
<td>COO, Citrus World</td>
<td>Lakeland, FL</td>
<td>2016</td>
</tr>
<tr>
<td>Central</td>
<td>One-member-one-vote</td>
<td>James Magnuson</td>
<td>GM &amp; CEO, Key Cooperative</td>
<td>Sully, IA</td>
<td>2014</td>
</tr>
<tr>
<td>Central</td>
<td>One-member-one-vote</td>
<td>David Kragnes</td>
<td>Owner/operator of a diversified farm raising wheat, sugar beets, soybeans and corn</td>
<td>Felton, MN</td>
<td>2016</td>
</tr>
<tr>
<td>Mid Plains</td>
<td>One-member-one-vote</td>
<td>Clint Roush</td>
<td>Owner/operator of a wheat, alfalfa hay and stocker cattle operation</td>
<td>Arapahoe, OK</td>
<td>2014</td>
</tr>
<tr>
<td>West</td>
<td>One-member-one-vote</td>
<td>Jon Marthedal</td>
<td>Owner of a farm producing grapes, raisins and blueberries</td>
<td>Fresno, CA</td>
<td>2013</td>
</tr>
<tr>
<td>Northwest</td>
<td>One-member-one-vote</td>
<td>Erik Jacobson</td>
<td>Retired President &amp; CEO, NORPAC Foods Inc.</td>
<td>Bend, OR</td>
<td>2014</td>
</tr>
</tbody>
</table>

Commentary in Outlook is for general information only and does not necessarily reflect the opinion of CoBank. The information was obtained from sources that CoBank believes to be reliable but is not intended to provide specific advice.
“On behalf of our entire board, I extend congratulations to the winning candidates and thanks for their commitment to CoBank’s continued success,” said Everett Dobrinski, chairman of the board. “Over the years, CoBank has benefited enormously from having a board with representatives nominated and elected by our customers, who come from rural America and understand the unique needs of the industries we serve. Every one of these individuals will bring tremendous insight and experience to our board, and we look forward to their contributions in the coming year.”

CoBank also announced that Barry Sabloff has been re-appointed to a four-year term as an outside appointed director. Sabloff, whose new term will end in 2016, formerly served as an executive vice president with Bank One in Chicago. He currently is vice chairman of Marquette Bank, a Chicago-based community bank, and a director for Calypso Technology, Inc., a provider of trading systems to financial institutions. Sabloff has served on the CoBank board since 2005 and is chairman of the board’s Audit Committee.

“Barry’s deep understanding of banking and finance is enormously valuable to our board, and we’re grateful he has agreed to serve another term with us,” Dobrinski said.

CoBank’s board of directors reflects the bank’s national scope and the diverse industries it serves. Members include agricultural producers, agribusiness executives and representatives from the rural energy and communications sectors. Twenty-four directors are elected by shareholders from six geographic regions covering all 50 U.S. states. The remaining board members are appointed to their seats.

The bank uses an independent Nominating Committee to develop a slate of qualified director candidates for each election. No current board member may serve as a member of the Nominating Committee. No member of management sits on the CoBank board.