Good morning. It is a great honor for me to address this distinguished group of agricultural lenders from throughout the world. I’m very impressed with the many interesting topics you are tackling during the next two days. In fact, I would enjoy staying and listening to your discussions, but instead I will be attending the meeting of the Federal Reserve’s Open Market Committee. I’ll be carrying the economic news from the Heartland to that meeting. In light of the FOMC meeting, I will confine my comments tightly to the agricultural finance topic that you assigned me.

As you all know, credit plays an enormous role in making agriculture more productive around the globe. Nowhere is this more evident than here in the United States. Many observers consider the U.S. food system to be one of the most productive and efficient in the world. Good access to capital is certainly a primary factor in that success. Capital fuels the acquisition of technology, yielding the steady rise in agriculture’s productivity during the past century.

But that very success now creates new challenges for your industry in the 21st century. Steady, significant gains in productivity have led to consolidation in nearly all segments of the U.S. food system. Thus, agricultural lenders now compete for a shrinking number of customers. Such competition has led to consolidation in your own ranks, and further consolidation probably lies ahead.
An even bigger challenge, however, may be adjusting to a dynamic rural economy where agriculture’s role in providing jobs is declining. Many agricultural lending institutions were born in an era when agriculture dominated the rural economy. That is no longer the case throughout much of the developed world. The U.S. rural economy has new opportunities in the 21st century, but many of these extend well beyond agriculture.

The new rural economy will require significant adjustments for lenders and policymakers alike. In general, it will be important to have competitive rural capital markets, with more attention given to improving rural equity capital markets. It also will be important to focus on policies that help rural America seize an emerging frontier of economic opportunities. Policies that encourage regional partnering and more rural entrepreneurship will be key policy initiatives.

With this in mind, I will cover three issues in my remarks today: the key role of agricultural lenders in making agriculture productive; the emerging frontier of opportunities in rural America; and the challenges of aligning rural capital markets and public policy with these 21st century opportunities.

**The Role of Agricultural Lenders in a Productive Agriculture**

Farmers in the United States have long benefited from an abundance of capital flowing into the agricultural sector. In 2002, U.S. farmers are expected to borrow a record $197 billion to fund their operations, up from a mere $23 billion in 1960.

A rich mix of institutions supply credit to U.S. agriculture. Farm operating loans are provided by commercial banks and units of the Farm Credit System. Most intermediate-term loans are now made by farm input suppliers—a rapidly growing source of credit. Many farmers now purchase seed financed by companies like Pioneer and farm
equipment financed by John Deere. Farm real estate loans are supplied by commercial banks, the Farm Credit System, and life insurance companies. Overall, commercial banks hold the biggest share of agricultural credit, accounting for about half of non-real estate and a third of real estate lending.

Ready access to credit at market rates is a major factor keeping U.S. agriculture efficient. Credit fuels the adoption of successive waves of agricultural technology: mechanization, hybrid seed, herbicides and pesticides, and now precision farming—the use of satellites to fine-tune crop cultivation. Each new wave allows agriculture to substitute technology for labor and produce more with less. Corn provides a telling example. In 1900, it took 33 hours of labor to produce 100 bushels of corn. A hundred years later, it takes just two hours to produce the same amount. The next wave of innovation in U.S. agriculture—biotechnology—promises to reduce that number still further.

Rising productivity produces great benefits for society, but it also leads to dramatic change in the structure of the industry. Shrinking profit margins spur firms to get bigger in search of economies of scale. Thus, consolidation has become the byword of rising productivity in agriculture. Meanwhile, increasing numbers of small farms turn to off-farm sources of income to remain viable. While the United States still has nearly two million farms, the largest 8 percent now control nearly 70 percent of total farm sales.

Consolidation is also prevalent in other segments of the U.S. food system. A handful of firms now dominate the seed and farm equipment industries, for instance. Mergers and acquisitions have been frequent companions to a more efficient food system. Grain handling and meat processing have seen dramatic structural shifts. In beef
processing, for instance, four firms now account for 80 percent of the cattle processed in this country. Food retailing is the most recent segment of the food system to experience consolidation. Four firms now account for a third of U.S. food sales.

Consolidation presents obvious challenges to you as agricultural lenders. Larger farms mean bigger loans to fewer customers. In addition, as population drops in many farm communities, there are fewer opportunities to lend to new businesses. The mounting size of farm loans also concentrates credit risk. Finally, with huge capital needs, agribusiness and food system companies often go directly to capital markets, leaving traditional lenders behind.

In short, agriculture is a highly successful industry, but success creates its own problems if you are an agricultural lender. With biotechnology on the horizon, consolidation seems likely to continue in farming and many other segments of the food system for the foreseeable future. In fact, biotechnology may lead to more vertical coordination among farmers, processors, and input suppliers. For example, biotechnology makes possible products such as “farmaceuticals,” but these products will move to market under much tighter partnering between seed companies, farmers, processors, and retailers. This trend to “supply chains” may lead to a blurring in both the demand for and supply of capital to agriculture. In sum, recent trends suggest further consolidation among agricultural lenders in the years to come.

**The New Rural Economy**

While continued consolidation poses a challenge, an even bigger challenge may be adjusting to a dynamic rural economy where agriculture’s direct role is declining.
Many of your member institutions were created when agriculture dominated the rural economy. That is simply no longer the case throughout much of the developed world. Other non-agricultural industries are becoming more important in the rural economy. Agriculture can still supply new growth to the rural economy, especially through a new generation of products, but agriculture’s role in the rural economy seems likely to continue its trend to still lower levels in the years to come.

Here in the United States, we can track this trend for agriculture. Agriculture accounts for less than 2 percent of U.S. gross domestic product. Similarly, agriculture’s share of the U.S. civilian labor force has fallen from 12 percent in 1950 to only 2 percent in 2000. The smaller role of agriculture in the rural economy is even more striking. During the past 30 years, agriculture’s share of employment has fallen from 4.9 to 3.1 percent. Agriculture’s share of rural income has fallen more than half, from 13 percent to 5.0 percent. In short, agriculture is now the primary source of income in only one in every 10 rural counties.

Agriculture’s declining role in the economy is not unique to the United States, of course. The trend is widespread throughout the developed world. By 2000, agriculture accounted for less than 5 percent of GDP in most developed countries and less than 2 percent in Japan, the United Kingdom, and Germany. Agriculture’s share of the labor force fell from a third to approximately 6 percent in Japan during the past 40 years. During the same time period, agricultural employment fell sharply in other countries across the globe, including Germany, France, Canada, Australia, and the United Kingdom.
Fortunately, the importance of other industries in rural America has risen to fill some of the void as agriculture’s role has declined. For example, manufacturing is now a leading source of employment in the rural economy. In 2000, factories produced one of every five dollars earned in rural communities. But change is constant and manufacturing too is evolving as it experiences enormous productivity gains, business consolidations, and fewer workers needed. Rural manufacturing also continues to feel the press of global competition. Thus, from 1995 to 2000, more than 100,000 rural factory jobs were lost, leaving some rural communities in search of new opportunities.

It will surprise no one then to find that many rural communities are turning to the service industry for new economic opportunities. In fact, the service sector has paced rural growth over the past decade. In the 1990s, service firms added almost two million jobs in rural communities to become the single biggest source of rural jobs. The fastest-growing rural communities now depend heavily on the service sector. Contrary to common perception, many of these new rural service jobs pay high wages in such industries as health care, business consulting, and engineering and management services. And like most other sectors, technology is a common thread in this new generation of rural jobs.

The growth in the rural service sector also highlights rural America’s widening role as a recreation destination. Rural communities increasingly serve as America’s playground. Communities are capitalizing on the scenic amenities that characterize many rural places. In fact, areas with high levels of scenic amenities have been the fastest-growing rural communities during the past decade.
Looking ahead, we think that rural America has many exciting economic opportunities, but many of these will extend beyond agriculture. In many respects, rural America’s economic frontier is defined by new technologies. These technologies are essentially doing three things: diminishing distance, creating new value, and heralding new products. Let me briefly mention two opportunities that seem especially intriguing to us.

Farmaceuticals offer a fascinating growth opportunity in agriculture. But in many respects, this new industry resembles a high-tech manufacturing business, as opposed to what we think of as agriculture. The opportunity to grow pharmaceuticals in fields instead of factories is no longer in the future. Last year, the first field of farmaceutical corn was harvested in Iowa. That corn produced a special protein used to manufacture a drug for cystic fibrosis. If additional fields can be grown, a high-tech processing facility may follow. The upside for rural Iowa and other parts of the Farm Belt is truly extraordinary.

Advanced manufacturing is another exciting opportunity. New technologies promise to make the countryside’s many labor-intensive factories globally competitive. North Carolina’s hosiery industry provides a good example. This industry produces 60 percent of the nation’s socks and consists mainly of small rural firms in the Catawba Valley. Feeling the pressure of global competition, the industry joined together in the late 1980s to create the Hosiery Technology Center. This center has helped firms adopt new state-of-the-art technologies and make their products world class.

On balance, we think rural America can tap significant new sources of economic growth in the period ahead. In most cases, the new growth will extend far beyond
agriculture. Still, new types of product-oriented agriculture, including farmaceuticals, could breathe new life into traditional agricultural areas. Laying claim to this new rural frontier, however, will not be easy. So, let me conclude with a few thoughts on how you and policymakers can help.

**Aligning Policy and Capital with the New Rural Economy**

The new rural economy will require significant adjustments on the part of both lenders and policymakers in the years ahead. As lenders located in mostly rural areas, you have a big stake in supplying capital and in supporting policies that help those areas find new sources of economic growth. What adjustments seem useful to consider?

Competitive markets for credit are vital to rural America’s future. Farmers and rural borrowers have long benefited from competition among a rich mix of credit providers. Such competition ensures that borrower needs will be met—and at market-based rates.

An even bigger need in the future may be institutions to supply equity capital to rural America. Entrepreneurs are crucial to claiming a new frontier of rural economic opportunity. And while those entrepreneurs probably have reasonable access to debt, the same cannot be said of equity capital. Rural America has successful equity capital funds, but they are few and far between. A critical issue going forward, then, is thinking through a new network of equity funds that can bring capital providers in touch with a new generation of rural businesses. To be effective, such a network must have the capacity to pool risk regionally and nationally.

Just as capital markets must adjust to new rural opportunities, so too must rural policy. In the past, agricultural policy was “rural” policy. But a different set of policies
is needed now if public officials want to help rural America seize its new frontier. The new farm bill illustrates the current policy dilemma: Less than 1 percent of total spending goes toward rural development.

It is important to recognize that farmers themselves have a big stake in new rural policies. Today, almost 90 percent of all farms in the United States get a majority of their household income from off-farm jobs. Thus, your customers have a huge stake in policies that brighten the rural economic outlook. So then, what new policy directions may help rural America—farmers, lenders, and Main Streets alike?

First, a focus on building new sources of competitive advantage is essential. The work of economists like Michael Porter shows that regions generally—and rural America in particular—must constantly invest in new sources of competitive advantage rather than merely protecting the old sources. Thus, investments in new technologies, new products, and new infrastructure are crucial. Thankfully, new technologies are emerging just as rural America needs them. But a lot of work remains in making new products commercially viable.

Second, regional partnering will be an important thread in new rural policy. Earlier this year, our bank hosted a national conference on rural policy. Rural leaders from throughout the nation agreed that reaching critical mass through regional partnerships is essential to developing the most exciting rural opportunities, including farmaceuticals. In many respects, such partnering runs against the grain of rural America’s long tradition of independence. Policy officials must think anew, therefore, about incentives for firms and local governments to cooperate.
Third, growing more entrepreneurs on Main Street will be a cornerstone of new rural policies in the United States and I suggest globally as well. Recent research at our bank shows that rural America has fewer high-growth entrepreneurs than the nation’s cities. To be sure, rural America has a rich tradition of entrepreneurship, but growing a new business in rural areas is simply more difficult than in the suburbs. Thus, new thought must be given to a rural business climate that will spawn new businesses and the support networks that will help them succeed.

While more and more rural stakeholders agree that new policies are needed, it is still unclear how rural policy will, in fact, change in the years to come. New policies are difficult to define and slow to emerge.

At the Federal Reserve Bank of Kansas City, we certainly do not have all the answers to the rural policy questions. But we are located in the heart of rural America and are committed to furthering the dialogue on what we believe could be an exciting time for rural America in the 21st century.

In closing, I would like to say a word or two about the work under way at our Center for the Study of Rural America. The Center was launched three years ago in this very place—the National Press Club. It serves as a focal point for rural research for the Federal Reserve System. I am especially proud of the Center’s work highlighting rural America’s new frontier and the policy issues that surround it. In the coming year, the Center will focus on rural America’s new economic engines, emerging regional economic partnerships, and rural policy innovations in the United States and abroad. We value the opportunity to exchange ideas about rural America’s future with key leaders like you.
Again, thank you for your kind invitation to join you here in Washington. I look forward to the discussion on these issues vital to the future of rural America and rural regions throughout the world.