Good afternoon!

Thank you for inviting me to speak to you today.

Three weeks ago: 6th anniversary of the Berlin Wall (November 9)

- weekend, St. Louis, getting acquainted with first grandchild

- working on remarks; thought about starting around 15 years from now, granddaughter’s teachers explaining why in middle of 20th century, an “Iron Curtain” (Winston Churchill) divided world.

- then, after 45 years, it seemed as though the political leaders one day said, “never mind”, and that Iron Curtain suddenly collapsed.

- Before she is 15, my granddaughter will have already asked her parents to explain everyday things, like “what do words such as ‘clockwise’ and ‘counterclockwise’ mean”? And, since the only telephones she will be using will have buttons, she will ask, “Why do people say ‘dial the phone’”? 
Given the business I am in, I’ve already had the experience of trying to explain to my own children why it was that for over 45 years, starting with the Roosevelt Administration in the early 1930s, it was illegal for American citizens to own gold coins, as well as gold dust, bullion, or even certificates or warehouse receipts for gold; those of you who have had the experience of explaining things to adolescents will know that their response was simply, “That’s Dumb”.

Let me go back to the Berlin Wall. It will be treated in history as a major political event; but, that does not explain the underlying forces at work that produced the political event.

In his book “Triumph and Turmoil”, former Secretary of State, George Shultz described a trip to Moscow in 1985 to meet the new Secretary General of the Soviet Union, Mikhail Gorbachev.

Shultz explained to Gorbachev that the accelerating pace of technological changes in information and communications was difficult for even the U. S. to keep up with, compared with places like Taiwan, Korea, Singapore and Hong Kong. Old Western Europe was falling behind, and for the socialist/communist, top-down, command-and-control economies, it was hopeless.
Gorbachev might have already recognized the power of such forces, and not long after taking power he launched his Glasnost and Perestroika reforms in an ultimately futile attempt to put some flexibility into the Soviet economy.

It is not so far fetched to say that my granddaughter will not worry about, and march in the streets to protest, nuclear missiles because of the technologies that brought us things such as FAX machines.

Certainly the young people that participated in the tragedy at Tiananmen Square understand the power of FAX machines and other information and communications technologies.

In the balance of my remarks today, I want to talk about how these technologies are changing the financial services industries. I hope I leave you convinced that other walls, just as artificial as the Iron Curtain, will share the same fate. I’ll also focus on some of the challenges it presents for central banks -- in the United States and around the world.

Recently, I joined the other officers of our Reserve Bank for an off-site planning session. Even though we are a part of the U. S. central banking system, the jargon and buzz words of our meetings are like any other business in America today.
People talk about:

- Total Quality Management
- Team concepts
- Employee empowerment
- Customer satisfaction
- Etc.

Our immediate customers are easy enough to identify and get adequate attention.

- commercial banks, savings banks and credit unions all use our payments services.
- The U. S. Treasury is our biggest customer since we are the Fiscal Agent -- every payment made by Uncle Sam to anyone, anywhere is drawn on a Reserve Bank. We have one big customer that takes in and spends over 1-1/2 trillion dollars in a year.

However, our ultimate customers are everyone in the country; as well as many people outside the country.

- every household and every business relies on our basic services every single day.
I thought about what it would be like to conduct a “customer satisfaction survey” to find out what ordinary people think about the job we are doing.

I imagine that, at most, the best guess most people would have about Federal Reserve Banks is that they have something to do with interest rates. They would not know that we are private, that our employees are not civil service (so we did not close when all those “non-essential” government workers were sent home a couple of weeks ago), that we have stockholders and pay dividends, and we are just as committed to efficiency and high quality services as any other business.

But what are the products? What lines of business are the Reserve Banks in?

As I thought about what our 260 million ultimate customers want from us, and how they might respond to a “satisfaction survey” if they did know what we do, it seems that, more than anything else, they want to take us for granted.

If we are doing our primary jobs very well, very few people will know that we are doing them.

It is only when we do not perform well that the media spotlight turns on what some of the 25,000 people employed in the 12 Reserve Banks do every day.
When the 12 Federal Reserve Banks were incorporated, almost 81 years ago, they were assigned 3 primary jobs--

1. try to keep commercial banks from going broke as they were prone to do in fairly frequent banking panics, such as in 1907;

2. serve as the U. S. government’s bank; which means,
   
   - every government check written for anything -- tax refunds, interest on government securities, repayment of government bonds, issue and redeem savings bonds

   - keep the records of who owns all those (now over $4 trillion worth of) government securities.

3. provide a uniform, efficient, reliable payments system

   - settle payments between the thousands of commercial banks;
     including sorting and rerouting a large share of the 62 billion checks/year.

   - issue a single currency to be used in all states and keep the counterfeits out, as well as make sure it is fairly clean and not ragged.
and, in recent times, serve as the nucleus of electronic payments --
wire transfers and automated clearing house services such as payroll
deposits, electronic bill paying, etc.

Monetary Policy, as we have come to think of it, was not a part of the
legislation that created the 12 Reserve Banks;

- the value of a $ was not an issue since we were on a gold standard.

That meant the dollar was defined as being worth 1/20 ounce of gold;
people sometimes say “the price of gold was $20 an ounce,” then raised
to $35 an ounce; that is not accurate; there was no question in people’s
minds about the value of gold; the purpose of the gold standard was to
try to maintain a predictable value of the $.

In a planning session, people try to project current trends and possible new
developments in an attempt to formulate a strategy for coping the best they can.

In our case, we think about information and communications technologies
(just like every other business today), and we think about possible legislation and
regulation and how they will transform financial services in the 21st century.

Just as paper currency and paper checks in the 20th century replaced the
metal coins, gold dust, and gold bars of the 18th and 19th centuries, we know that
electronically initiated debits and credits will become the primary way people pay for things in the future; the role of paper will be no more significant than metal coins are today.

Households as well as business will use "smart" stored-value cards -- essentially, privately issued electronic currency; plastic, reusable (traveler’s cheques). Conventions of 20th Century will have to change,

- "deposit" vs. "non-deposit" liabilities, often arbitrary. [New Zealand]
- transferable, interest bearing, credit balances at non-bank businesses
- "deposit" insurance
- mutual funds

Issues will be: how to assure the same efficiency and reliability of an all electronic payments system that we grew to depend on with paper currency and paper checks; how to prevent electronic counterfeiting, fraud, embezzlement, etc.

1900: 98% of credit -- commercial banks

- Convention: legislation/legal definition: both deposits and commercial loans

1930s: financial services industry: fragmented/segmented

- massive increase in the intrusion of government in economic affairs.
Financial service companies restricted along artificial lines of business: neat little boxes that were further partitioned;

1. Depository institutions,
   - Partitioned: CBs, S&Ls, credit unions, MSBs, individual banks.

2. Securities/underwriting,
   - Partitioned: brokerage, security dealers; mortgage banks, finance companies.

3. Insurance underwriting and sales,
   - Partitioned: brokers, dealers, underwriters, rating agencies

What we think of as a "bank" was restricted in types of loans they could make, securities they could own, types of deposits they could offer, how much interest they could pay, where they could have offices and sometimes even how much profit they were allowed to earn.

- Regulation Q (1980s) (price)
- Interstate branching (June 1, 1997) (place)
- Glass-Steagall (product)
Future: distinctions blur [New Zealand]

– transferable, interest-bearing credit balance at phone company, cable TV company, or America On-line account.

Issue will be: how to assure stability of financial services providers so we do not have a repeat of the types of runs and banking panics we saw in the 19th century and even occasionally in the 20th century.

The challenge of monetary policy will be no less.

In the 20 odd years since the end of the gold standard, every central bank in the world has been engaged in “on-the-job training” of how to stabilize the value of pure fiat currencies.

Finally, in the 1990s we seem to be getting the hang of it as the inflation rates of the 10 largest economies are all between 1 and 4%, and, in fact, many small countries, such as New Zealand, have essentially eliminated inflation.

If you attended a meeting of central bankers from anywhere in the world today, it would be hard to find any that did not agree with a young Abraham Lincoln when he said,

“no duty is more imperative on [that] government than the duty it owes the people of furnishing them a sound and uniform currency.”
Clearly, new communications technologies in a global financial system mean major challenges to all three of the primary jobs of a central bank:

- How to provide an efficient and reliable payments system so that ordinary citizens can simply take it for granted that their paycheck will get credited to their account and their payments will be properly handled.

- How to provide sound, safe financial institutions so ordinary citizens can simply take it for granted that their savings are secure and loans are available when they need them.

- How to provide a currency whose value is stable so that ordinary citizens can make rational plans for their own future and that of their children by simply taking it for granted that in the future a dollar will have the same value as today.

Those are our challenges.