

AMERICAN FINANCIAL SERVICES ASSOCIATION

Chicago, Illinois  
May 11, 1998



I. Introduction

- A. Thank you. It's nice to be here before a group that's a very large and very important part of the financial services industry. I spend a fair amount of time talking to bankers, but I haven't had as many opportunities to appear before others involved in financial services. Having this opportunity is useful for me since the Fed's interests extend beyond the banking industry to the entire payments system and economy. So it's a pleasure to be here. I'm looking forward to hearing your questions and comments.
- B. When Donna asked me to discuss the changing face of the financial services industry, I was delighted and felt that the timing was perfect.
- C. That was six months ago—and in just that short time the face of the industry has changed dramatically with the recent flurry of mergers.
- D. You need a scorecard to keep up with the latest developments. Fortunately, I had a chance to discuss the many changes in the industry when the Chicago Fed hosted the 34th annual Conference on Bank Structure and Competition just last Thursday and Friday.
  - 1. The Conference brings together academics, regulators, and financial service participants to discuss public policy changes affecting the industry.
  - 2. It's widely considered to be the leading conference of its type in the nation.
  - 3. The conference covers a wide range of topics and includes presentations from some of the leading figures in the industry,

4. So I couldn't ask for a better crash course on the latest developments in financial services prior to giving this speech.

## II. Fed Review

- A. But first, it might help to put my comments in perspective if I give you a little background about the Fed System.
- B. As the nation's central bank, of course, our mission is to foster a safe and sound financial system and a healthy, growing economy.
  1. We formulate monetary policy.
  2. We supervise and regulate banks.
  3. And we provide financial services to the U.S. government and depository institutions, including processing checks and electronic payments.
- C. The Fed consists of 12 regional Reserve Banks, which are overseen by the Board of Governors in Washington, D.C.
- D. The Chicago Fed serves a five-state region consisting of most of Indiana, Illinois, Michigan, and Wisconsin, and all of Iowa.
- E. We have a head office in Chicago as well as offices in Detroit, Des Moines, Indianapolis, Milwaukee, and Peoria.

## III. Pace of change

- A. Whether you're a regulator, a service provider, or a consumer finance executive, you face an unavoidable fact of life—the financial services industry is changing radically — due in no small part to technological innovation.
- B. Saying that technology is important in our industry has become a cliché.
- C. It may be more accurate to say that technology is actually driving our industry. Changing it at an incredible speed.
- D. Most of us are so busy trying to keep up with the latest innovations that we don't have the time to reflect just how radically technology has changed every part of our lives — and how rapidly.
- E. The pace of change has increased dramatically—like a high-speed train that's already left the station and is gathering more and more speed.

#### IV. Technology

- A. Let me give you an example. In 1944 IBM built the first computer, the electro-mechanical Mark 1.
- B. In 1944 nominal dollars it cost \$200,000, a sum equivalent to almost \$2 million today. It was 51 feet long, 8 feet high, weighed more than 4 tons, and could do 3 calculations a second.
- C. Today's computers fit on our laps, cost a fraction of the original, and can calculate 400 million instructions per second.
- D. Phenomenal changes like this have taken place in the telecommunications industry too.
- E. The telephone was invented in 1876. For 40 years after it was invented, people could make only local calls.
- F. By 1915, the year before the AFSA was founded, workers had strung lines across the country, and we were able to make coast-to-coast calls for the first time.
  - 1. The cost of such a call—more than \$20 for three minutes. That was equal to about 2 weeks worth of wages for the typical worker in a factory at that time.
  - 2. Today the cost of the same coast-to-coast call is about 50 cents.

#### V. Financial Change

- A. These and other modern technologies have had an enormous impact on the financial services industry.
- B. In keeping with the conference theme, and to set the stage for your later sessions, I'd like to present a broad overview of the financial services landscape.
- C. In particular, I'd like to focus on five areas that have been affected by technological change, drawing heavily upon the discussion at the Bank Structure Conference. The topics are:
  - One—managing risk in the payments system;
  - Two—the appropriate role of a central bank in the payments system;
  - Three—why checks continue to be so popular and why electronics payments aren't more popular;
  - Four—the Asian financial crisis;
  - Five—the Century Date Change.

## VI. Managing Risk

- A. First, managing risk in the payments system. As we all know, the global payments system is undergoing significant change.
- B. As Alan Greenspan said at our Bank Structure Conference, our international financial system is so different from the way it used to be that it can be characterized as completely new.
  1. It hasn't simply evolved — it's a new species.
- C. Today, we have an interdependent, interlinked global financial system with the ability to react to events with incredible speed.
- D. As we saw during the Asian crisis, this high-tech international system can respond with brutal speed and efficiency in moving money away from potential risks.
- E. How much have large-dollar payments systems grown? Consider these numbers:
  - The dollar value of foreign exchange transactions in an average day is about \$1.2 trillion—that means foreign exchange transactions in a single week are about the same as U.S. GDP for the entire year.
  - The average dollar value of Fedwire transfers each day is about \$1.2 trillion.
  - And the average daily volume on CHIPS the largest private-sector payments system in the world is about \$1.4 trillion.
- F. Managing risk in the payments system was a recurring issue at the Conference. Some common themes emerged.
- G. Many speakers stressed the important role of the payments system.
- H. Each noted that the payments system is the lifeline of the economy, the circulatory system that allows the overall economy to function efficiently.
- I. The primary objective set forth by each speaker was essentially the same—we should do everything necessary to allow for a payments system that:
  - One—supports, rather than hinders, economic growth;
  - Two—facilitates, rather than exacerbates, problems during times of financial stress; and—
  - Three—responds to, rather than resists, changes in financial markets, technology, and the overall economy.
- J. During his keynote address, Alan Greenspan emphasized that these characteristics must hold not only in domestic markets, but also in the increasingly complex international clearing and settlement arrangements.

## VII. Central Bank Role

- A. The second topic I'd like to cover is the role of a central bank in the payments system.
- B. During the Conference, Alice Rivlin, vice chair of the Federal Reserve Board, reviewed the Fed's recent examination of its role in the payments system.
  - 1. As I mentioned earlier, the Fed provides a variety of financial services to banks and thrifts including check processing, Automated Clearinghouse, and wire transfer.
  - 2. The Fed competes in the marketplace, charging a fee for its services—a fee that includes the costs of taxes and capital the Fed would incur if it were a private firm.
- C. Given the changes in financial services driven by technology and other factors, the Fed decided to conduct a fundamental review of its role in the payments system last year.
- D. A committee led by Alice Rivlin held extensive discussions with both users and providers of payments services.
- E. To provide a basis for discussion, the committee developed and analyzed five “scenarios” for the Fed.
  - 1. The scenarios ranged from the complete liquidation of the Fed's operations to the Fed playing a more active role in encouraging electronics.
  - 2. The Committee focused on the Fed's retail services—check processing and ACH.
- F. Based on the feedback from users and providers and other work, the committee concluded that the Fed should continue to provide check and ACH services and should play a more active role in encouraging the transition to electronic payments.
- G. One specific recommendation of the Rivlin Committee was to have the Fed help educate the public on the advantages of electronic services and collaborate more closely with end-users and industry participants to evaluate standards.
- H. At the Chicago Fed we've formed a group to focus on these goals. We're committed to being a leader in making the potential of electronic payments a reality.
- I. Despite the Rivlin Committee's recommendation, there certainly isn't complete agreement on the role of a central bank in the payments system.
- J. During the Conference, for example, it was argued by some that the Fed's operational presence may actually hinder the efficient evolution of the payments system.
- K. Instead, its preferred role as a standard setter and rulemaker was emphasized. These discussions are not new.

- L. The appropriate role of the Fed has been debated for quite some time.
  - 1. I encourage that type of debate. It's healthy for the industry and society in general and should lead to better public policy.

## VII. Electronic Payments

- A. The third topic is one I've touched on already—the movement—or lack of it—toward electronic payments.
- B. Certainly electronic payments have experienced some impressive growth. A few quick statistics illustrate the point.
  - The dollar value of ACH transactions last year was more than \$11 trillion—a 9.9 percent increase from the previous year.
  - The number of debit cards issued by U.S. financial institutions reached 205 million last year.
  - On-line business transactions totaled an estimated \$7.5 billion in the U.S. last year. Many project a dramatic increase during the next four years.
  - A very small percentage of U.S. households used Internet banking last year—an estimated 1 to 2 percent. But some estimate usage will accelerate quickly in the next two years.
- C. Despite all this electronic activity, Americans still wrote about 63 billion checks last year.
  - 1. According to one study, the average American signs about 270 checks each year; the average German signs 10.
- D. During the conference we heard from a number of key industry participants on their plans to aggressively promote electronics.
- E. For example, the Banking Industry Technology Secretariat—whose board is made up of the chairmen of the ten largest bank holding companies in the U.S.—discussed its plans to aggressively pursue the advantages of electronic payments.
- F. We also heard how the move to electronics has progressed much more quickly in Canada.
  - 1. This is partially the result of a significantly concentrated industry structure.
  - 2. But it was also argued that it was the result of effectively handled check float.
- G. An increase in electronics implies slower growth in checks.

- H. During the conference we heard that U.S. check volume may start to decline in the near future.
  - 1. This is in line with projections by the Chicago Fed.
  - 2. The twist offered by one conference participant is anecdotal evidence from the check printing industry that the decline may indeed be near.
- I. How fast a decline can we expect?
- J. According to one estimate, the share of non-cash transactions that are electronic is expected to rise from 23 percent in 1995 to nearly 50 percent by 2010.
  - 1. Certainly a dramatic increase.
  - 2. But that still means that checks will be with us for many years to come.

## IX. Shift from Checks

- A. Why is the movement so slow? The float associated with paper checks is frequently cited as a major reason.
- B. Another possibility is that the demise of the paper check doesn't make sense from a profit and loss perspective.
- C. The check product can add to a bank's revenue stream by encouraging the use of other services and can actually be a cash cow.
- D. Overall, it appears that paper-based payments will continue to be a durable feature of our economic landscape.
- E. But I'm hopeful that we're approaching a turning point for electronic payments in the U.S.
- F. Certainly we're not close to having a cashless society—or even a checkless one.
- G. But after decades of unfulfilled promise, electronic payments are tantalizingly close to achieving critical mass.
- H. The Federal Reserve and the Chicago Fed are committed to fostering the transition to electronics by working with other service providers and customers.
- I. I'd certainly encourage all of you to explore electronic alternatives within your organization.
- J. We have a major opportunity to reduce our dependence on checks.
- K. That's something that will benefit consumers, businesses, and the economy as a whole.

## X. Asian crisis

- A. The fourth topic on my list is the Asian financial crises.
- B. As you might expect, this was a topic that generated considerable discussion at the conference.
- C. Alan Greenspan stressed the need to limit moral hazard—the distortion of incentives that occurs when the party who stands to gain from the risk doesn't bear the full costs of the risk.
  - 1. In other words, someone who has a lot to gain, but not much to lose.
- D. The moral hazard associated with both implicit and explicit safety nets in the Asian countries was a key concern.
- E. More transparency of information was offered as one means to address these issues—particularly in the interbank market.
- F. A representative from the Bank of Japan emphasized that the crises forced Asian countries to understand the importance of a safe and efficient payments system.
  - 1. In particular, it heightened the need for the accelerated development of real-time gross settlement systems and delivery versus payment systems.
- G. We also discussed the IMF's response to the crises.
- H. The overall goal of the IMF was to reestablish confidence in the affected countries.
  - 1. This involved providing financial support and working to maintain or reopen lines of external financing.
- J. The IMF's efforts also involved changing the infrastructure of affected countries and encouraging adjustments to monetary policy to reduce pressures on the balance of payments.
- K. The programs received some criticism from some of the speakers at the conference. This criticism went beyond the traditional argument that the IMF failed to adequately predict the crises.
- L. It was also argued that the IMF's actions weaken market discipline.
- M. Even if the IMF requires changes to the infrastructure, the “rescue” of parties involved in the crisis may hamper fundamental reform. The resulting moral hazard problems may actually set the stage for the next crisis.
- N. There's obviously a wide spectrum of opinion regarding the IMF's actions. Overall, I think the IMF is on the right track, especially considering the many changes in the financial system and the enormous complexity of the Asian situation.

- O. Clearly, all of us involved in the financial system will profit from studying the Asian crisis and learning from it. The financial system is rapidly changing. We need to do everything we can to ensure that our policies are appropriate given these many changes.

## XI. Century Date Change

- A. The last item on my list is the Century Date Change—or the “Millennium Bug.”
- B. All of us will probably be having a good time at our New Year’s Eve party in 1999. But there’s a lot of concern that our computer systems might not be ready to join the party.
- C. Dealing with the problems is enormously time consuming and expensive. It’s hard to accurately estimate the amount of resources that will ultimately be required.
- D. One educated guess developed by the Federal Reserve is that the U.S. private sector has already spent roughly \$50 billion.
- E. To put that number in perspective, The Gartner Group estimates that total costs ultimately will be \$300 to \$600 billion worldwide.
- F. At the Federal Reserve, we’ve been working on this for quite some time. We are giving the Year 2000 effort our highest priority.
- G. In the payments area, we’re focusing on critical services such as our Fedwire funds transfer and Automated Clearing House.
- H. Our Year 2000 work includes remediation and testing of all the components of these systems...the supporting telecommunications network...and all the other systems supporting these operations.
- I. Changes to *all* our critical computer programs, as well as system and user-acceptance testing, are on schedule to be completed by the end of this year.
- J. The systems supporting our critical financial services will be ready by this July.
- K. A test program that will enable depository institutions to begin testing their payments applications that interface with the Fed will also be in place by July.
- L. In fact, we published a test schedule for depository institutions in March.
- M. Bank supervision poses similar challenges.
- N. As a supervisor we’re closely monitoring the Year 2000 preparations of the institutions we oversee.
- O. The goal is to identify and address problems that arise as soon as possible.
- P. Part of that effort is ongoing communication with the industry and with the public.

- Q. I'm sure you're all quite familiar with this issue, but I encourage you to make sure that there's a very strong commitment from both yourselves and the other senior executives in your organization.
- R. Dealing with the "Millennium Bug" will require coordination and cooperation from all of us.

## XI. Conclusion

- A. That's a quick overview of the financial landscape from my perspective.
- B. Admittedly, the view may sometimes seem like watching scenery while sitting in a speeding car.
- C. Shut your eyes for just a second and there's something new to look at.
- D. But it's also a time of great promise and opportunity.
- E. The Federal Reserve is committed to working in its roles as a supervisor and service provider to help fulfill that promise.
- F. Thank you.