

SPEECH

Patrikis: Retail Banking Evolution and Risks

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Remarks by First Vice President Ernest T. Patrikis before the Bank of Japan It is a pleasure to be here with you today to discuss recent developments in retail banking in the United States. Because many of the changes are being driven by technological innovation that enables banks to reduce costs and compete more effectively, I believe that the evolution of retail banking in the United States will be of considerable interest to the banking community in Japan.

At the Federal Reserve Bank of New York, we have been studying the implications of a broad range of topics at the retail level, including: (1) Internet commerce, (2) new types of electronic retail payments, (3) electronic retail banking, and (4) the movement more generally of retail financial services to electronic delivery, including insurance, discount brokerages, and mutual funds. And, as is probably the case for many observers, both here in Japan and in the United States, our thinking on these topics seems to be in a constant state of flux, or at least in a state of evolution. The delivery of retail financial services seems poised for some significant and perhaps rapid change, but the exact outcome still appears somewhat unpredictable. As a result, some of my remarks today will necessarily be speculative in nature. However, thinking seriously about the possible future implications of trends that appear to be developing today will always involve some degree of speculation, whatever the topic of the discussion might be.

I will organize my remarks today into three broad topics: (1) the movement toward electronics in the delivery of banking services in the United States, (2) the potential for this movement to electronics to create substantial change in the nature of competition in retail banking markets, and (3) the new types of risk banks could face as a result of these developments.

1. The Movement to Electronics.

In this opening section of my remarks, I would like to review electronic commerce and payments, the new electronic-delivery channels for retail banking, and small-business banking and electronics. With this background information in hand, we will be prepared to look at the competitive issues in the second section of my remarks and some of the potential risks in the third section.

A. Electronic Commerce and Payments. Electronic commerce over the Internet, involving both financial and nonfinancial products, seems ready to begin a period of rapid growth. And this growth, I believe, will create demand for new payment instruments. Just about every day now, we read about electronic-money products, standards for making secure, electronic credit-card payments, and efforts to create an electronic version of a check, all of which can be used for making transactions over the Internet. Indeed, some analysts already argue that technology (computer networking and encryption) is no longer standing in the way of electronic commerce, rather the major obstacle is consumer acceptance of these new, electronic instruments. Consumer acceptance, in turn, will require banks to ensure the confidentiality, availability, and integrity of the transactions and information they process.

Of course, some analysts have been predicting the cashless, checkless society in the United States for some time now, and they have been proven wrong time and again. Indeed, I started work at the Federal Reserve Bank of New York about 29 years ago to work on the "checkless society." By now, I have come to recognize that the check will be with us for some time to come. Consumers prefer to make payments with paper checks because they maintain control over the timing and the amount of the payment as well as retain a paper record of the transaction. Progress is being made in converting some check payments to electronics, in particular a growing volume of payroll checks are being converted to direct deposit over our automated-clearing-house (ACH) system. For ACH to become more successful, however, it will need to offer consumers the same flexibility as the paper check in terms of controlling the timing and the amount of payments. Some technology companies are making progress in this area through electronic bill presentment and payment using personal computers, and we will discuss their ideas in more detail later in my remarks.

But first, we should take a look at the more general implications of moving commerce to electronics. In the past, the movement to electronic retail payments was perhaps hampered by the fact that commerce remained very much point-of-sale at physical locations or through the postal system. But in the future, a larger volume of commerce may be performed through electronic communications and distribution networks. And once the consumer learns how to pay electronically for goods and services ordered over the Internet, the consumer may ask: "why not also pay those recurring, monthly utility bills with an electronic check?" Or, if the consumer begins to use electronic money to pay for small-ticket items on the Internet, the consumer might say: "why not also use E-money stored on smart cards to pay for transit fares, parking meters, vending machines and other items purchased routinely in the physical world?"

In other words, electronic commerce on the Internet, with its potential to offer a wide variety of goods and services at the lowest possible prices, could well turn out to be the catalyst that eventually shifts a broader range of paper based payments to electronics. Indeed, some of our leading banks seem to be anticipating such a movement. They are initiating pilots to test electronic payments, in one case an electronic money product in my "own back yard," the Upper West Side of Manhattan. This pilot will be the first in the United States to test whether some important barriers can be overcome, including whether Mondex and Visa Cash can be made interoperable at the point sale and, hence, limit the number of card readers each merchant will need to just one.

B. Electronic Delivery Channels. Internet commerce is not the only factor encouraging the increased use of electronics. ATMs (automated teller machines) are becoming more sophisticated and offering more services. For example, one technology firm in the United States is developing the concept of a mail box for electronic mail, linked to the consumer's bank accounts and secured by the consumer's ATM card and personal identification number (PIN). Not only would the customer be able to read messages at any ATM location, but also pay, electronically, bills presented in a standardized format to this secure mail box. Personally, I find this idea of "linking" the ATM and Internet networks by offering a new banking product (the secure mail box for electronic mail) a very novel one, and we will see over time how bankers and consumers react. It could open up electronic payments as an option to a broader range of consumers, including those who cannot afford personal computers and may be receiving benefits electronically under various state and federal programs.

Banks have come up with another novel idea -- in this case to encourage PC (personal computer) banking -- reduce the fee for the service to zero. This action apparently has attracted the attention of many consumers, and bankers tell me they are beginning to see significant growth in PC banking. I suspect the zero price was only part of the story, the home banking packages themselves have been greatly improved. And more improvements are coming. Three or four major efforts are underway to develop the technology that would permit presentation of bills directly to consumers' personal computers, with an electronic payment option appearing on the screen at the same time. The payment itself would be processed over the ACH system we discussed earlier. The stumbling block here for banks is one of consumer perceptions -- that is, whether consumers will feel they are: "electronically visiting their banks" or "electronically visiting a technology company" to receive and pay their bills. The extent to which technology companies could come between banks and their customers is potentially an important issue, and I will come back to it in a broader context in a few minutes, but first I would like to complete the review of electronic access channels for retail banking.

Banks are also developing highly automated telephone centers to help consumers with many of their banking needs without visiting a branch. Phone center employees, however, will need to be highly skilled in the future, not only helping customers with a more diverse range of banking products, but also with any technical access problems the consumer might encounter when banking with personal computers or ATMs. As a result, many bankers believe that the telephone center will be a pivotal delivery channel because of the wide range of banking services as well as technical support that will be provided. I expect that bankers will invest considerable sums to keep their phone centers "state-of-the-art" and to attract employees with the necessary sets of skills.

With access to banking through automated telephone centers, ATMs, and personal computers, I have heard some banking analysts argue that retail banking some day could become largely an electronic, remote-delivery, self-service business. To make this happen, banks in the United States, I believe, will eventually offer the best deals on banking products to those consumers that do all their banking electronically, simply because it is much less expensive to serve customers electronically than it is through the branch network. As a matter of fact, some recent research at the Federal Reserve Bank of New York suggests that an Internet bank created de novo (with no conventional branches) could have a cost advantage over banks with brick-and-mortar branches of as much as 200 basis points in terms of the spread between the rates charged on loans and the rates paid on deposits.

C. A Note on Small-Business Banking. Electronic delivery of banking products is also more efficient for serving small-business customers, and banks are actively promoting electronics in this market as well. However, my remarks today are quite lengthy, and I would like to keep them focused, for the most part, on the delivery of banking products and services for individual consumers. However, I will note that banks in the United States are making electronic, remote banking more available for their small-business customers as well, but with a different product mix for their specialized needs. In some cases, serving the specialized needs of small businesses involves upgrading consumer, electronic banking packages, and in others offering simpler versions of the products banks have developed for their large, corporate customers, including real time balance information and wire transfers. With either approach, the movement to greater reliance on electronic delivery channels for small businesses has many of the same competitive implications as is the case for retail, consumer banking. With this in mind, let us turn next to the competitive issues.

2. Changing Nature of Competition in Retail Banking Markets.

This general movement of banking services to electronic delivery has stirred up my imagination and prompted me to think long and hard about the competitive landscape for retail banking services in the future, including: (1) reduction of geographic barriers, (2) commoditization of banking products and new competitors, and (3) the new competitive strategies deployed by banks. Let me now share my views with you on these three topics.

A. Breakdown of Geographic Barriers. If the consumer (or small-business manager) can conduct the full range of banking business with a telephone, personal computer, or an ATM, will it matter as much in the future where the physical location of the bank is? In other words, geographic convenience could make little difference in the future. In which case, the consumer will choose banking services largely on the basis of price considerations -- as many consumers already do for credit cards. And with banks advertising their services and accepting applications electronically over the Internet, a time may come in the not too distant future when the consumer will be able to conduct a large amount of highly automated "comparison shopping," using so-called "intelligent-agent" software programs to search for and look at products from banks all over the country, not just from those banks that happen to be located near the consumer's home or work place. There are pages on the Internet showing the highest deposit interest rates and the lowest loan interest rates. Already we are seeing some evidence that banks are beginning to price their products uniformly for regional or national markets, rather than for local markets, and interstate branching can only encourage this practice as bank management and decision making become increasingly centralized. In terms of antitrust analysis, this outcome may well mean that the geographic market for banking products will become much more regional and, in due course, national in scope. The impact of a merger is analyzed on a geographic market basis, and over time supervisors may need to shift from a local-market analysis to a regional and eventually a national-market analysis.

B. Commoditization of Banking Products and New Competitors. In addition, this "electronic comparison" shopping, that consumers will be undertaking in broader banking markets, will not necessarily always be for a "complete bundle" of banking services from a single bank, but could be on a product-by-product basis, or, as financial products become increasingly standardized as they become automated, perhaps I should say on a "commodity-by-commodity" basis. That is, electronic delivery of banking services could erode the brand-name loyalty consumers now have to their banks.

Moreover, for products like credit cards, mortgages, auto loans and some investment and savings products, there will also be nonbank competitors, perhaps "category killers" specializing in being a very large provider of just one product to gain the lowest unit costs through economies of scale in processing. But the advantage of these nonbank competitors will not just come from lower processing costs created by vast scale.

Many of these nonbank competitors do not have to cover the large fixed cost of an extensive branch network as most commercial banks must do. They can operate largely through telephone, mail, and eventually perhaps Internet distribution. Hence, even if banks attempt to reduce processing costs by: (1) merging into ever larger institutions or (2) outsourcing to specialized vendors that can achieve comparable scale economies, banks may still be at a competitive disadvantage because of their heavy reliance on bank branches. No doubt, competition in retail financial services could become much more intense over time, and many banks will probably be taking a careful look at the optimal configuration of their branch networks as retail banking becomes more electronic.

And what about the technology companies that provide consumers with the network connections and the computer software to search electronically for the best price on each financial product? Are these companies friends to the consumer, but foes to the banks? Will consumers feel their primary financial relationship is with these technology companies rather than with the banks that add the actual "banking content" to the products delivered electronically? Or to put it differently, will banks be able to preserve their individual "brand names" such that they can maintain continued, direct access to their customers and thereby retain the ability to sell these customers additional financial products? To preserve their brand names, many bankers believe that they will need to continuously add value in their relationships with their customers. For example, a bank that does not offer certain financial products, such as insurance, might add links to its web-site to high-quality insurance companies, thereby maintaining the perception in its customers' minds that the bank's web-site is the first place to go for information about financial services.

Many of you, I am sure, are already aware of these issues, but the bottom line I am trying to get to is that the nature of competition in retail banking, and in retail

financial services more generally, could be radically changed by the movement to electronics. Consumers will have access to more information, from more competitors, in a faster time, than ever before. Banks, nonbank providers of financial services, and technology companies will all, at least to some extent, be trying to establish the primary relationship with the consumer, while in some cases providing services to one another or perhaps even selling each other's products. For some people, with a traditional view of retail banking, this new marketplace for retail financial services will be very confusing at times, with: (1) banks and nonbanks offering similar products, and (2) banks and technology companies forming alliances to solve certain problems, at the same time the banks remain concerned about the intentions and motives of some technology companies.

C. New Competitive Strategies for Banks. Some banks in the United States, of course, are not relying entirely on new, sophisticated technology, but are thinking of other ways to compete, cut costs, and gain access to the consumer, at the same time avoiding direct competition in those dimensions where nonbank competitors already have a big advantage. For example, rather than relying on conventional branches, or setting up Internet sites, and waiting for the consumer to take the initiative and eventually come to the bank in person or electronically, these banks are putting smaller branches in supermarket (large grocery-store) chains where many consumers, including the customers of their competitors, are virtually certain to come a few times each week. These banks, of course, are placing self-service, electronic, access devices in these supermarket branches to keep costs as low as possible, but also have one or two bank employees available to answer questions in person and sell banking products on a person-to-person basis. These scaled-back, but strategically placed, branches might help these banks capture that segment of the retail market that is not ready for total electronic delivery of financial products, or those who might not actively seek information about financial products. In any case, this approach to bank branching is considerably less expensive than conventional, stand-alone branches and is one of the alternative branch configurations many banks in the United States are considering.

Another example of this strategy, but on an even grander scale, is the alliance between a large bank and a nationwide travel-service company. The bank will be opening kiosks across the nation in the offices of this travel-service company, a rather bold move to gain a national presence at low cost. As you can well imagine, large scale and substantial resources are necessary to follow this strategy, and many smaller banks may find it difficult to compete with larger banks that expand geographically and lower unit costs through these alternative branching strategies. This outcome, along with recent legislation removing interstate branching restrictions and the perceived need to attain large scale to reduce processing costs, could give added momentum to consolidation of the banking industry in the United States.

Banks are also beginning to realize that they have a large amount of information about their customers in their electronic data bases and are making an effort to consolidate this information into data warehouses so they can target certain customer segments for new product offerings and not waste resources making the same product offering to other segments that probably would not be interested. The transmission of the product offerings to the targeted consumer segments will become more electronic, with banks "pushing out" the information over the ATM and personal computer networks. Personalized messages will appear on the computer or ATM screens when the targeted consumers access these networks for their routine banking business.

Not only will information consolidation make it possible for banks to market their products more efficiently, it will also enable banks to charge fees for financial services that reflect the overall relationship with the customer, reducing the chances that the individual products will be reduced to the level of commodities in the eyes of the consumer. In other words, banks hope to be able to sell the value of the overall, individually customized relationship in the provision of financial services, thereby preserving their "brand names" in the minds of their customers and preventing defection to nonbank competitors.

The increased emphasis on information gathering is causing banks to change their views on other parts of their business as well. Some bankers are beginning to believe that, with the low margins and intense competition in processing payments, very little money can be made in the actual processing of transactions. However, the information base that can be assembled as a by-product of the processing business could be a very valuable marketing tool for banks. Some of the banks' competitors seem to be exploring this idea as well in rather innovative ways.

For example, the major credit card companies are looking for new ways to expand their role in the payments processing and information gathering business. They are encouraging consumers to have their recurring monthly bills automatically charged to their credit card accounts. This practice, if it becomes popular, could: (1) consolidate several payments to just one each month, (2) reduce significantly the number of checks the consumer writes, (3) save postage costs for both the consumer and biller, (4) reduce handling costs and improve the timeliness of payments for billers, (5) give the consumer the option of using credit to pay recurring monthly bills, and (6) expand credit card processing volumes and give the credit card companies more information on consumer spending patterns.

As a result of this initiative by the credit card companies, as well as the ongoing development of automated bill presentment and payment by technology companies, banks feel more pressure to offer new presentment and payment options to their customers to maintain their position in the payments business and their access to valuable information. The secured, electronic mail box accessible through the ATM network that I mentioned earlier may be one way the banks can meet this competitive challenge. More generally, however, banks want to be sure that consumers "will electronically visit the bank," not some technology company when they review and pay their bills.

We have covered a large amount of material in this second section of my remarks. Let me conclude by saying that many bankers believe that to be successful in the future, they must: (1) create the cost accounting systems that will enable them to manage individual customer relationships over the full range of banking products (not individual banking products over the entire customer base), and (2) take advantage of the emerging Internet technology without becoming "a back-office operation" for a technology company. Next, I would like to discuss the risks banks might face as a result of this new electronic paradigm for retail banking.

3. Risks Faced by Banks in This New Electronic Paradigm.

Banks could be facing some new forms of risk in the future as a result of this movement to electronics. These risks include: (1) the potential for losing the competitive edge by underestimating the potential for electronics in banking, (2) inadequate planning for electronic security, (3) incomplete understanding of the responsibilities of performing the functions of a certification authority for electronic commerce, and (4) the possibility for onerous regulation if banks do not provide reliable electronic banking products. I would like to say a few words about each of these risks.

A. Underestimating the Potential for Electronics. In the previous section, we already began to discuss one risk banks will face in the future -- the risk that they misjudge the potential for electronic delivery of retail financial services, while their competitors judge the potential more accurately, and banks lose the primary relationship with their customers. Major, cooperative efforts are being undertaken by banking trade associations in the United States (Integriion and the Bankers Roundtable BITS project), aimed specifically at attempting to avoid this very outcome. Banks do not want the technology companies to be able to dictate how and on what terms bankers will be able to communicate with their customers. How successful these efforts will be remains to be seen. The competition is indeed formidable, and I suspect many banks wish they had started this effort much earlier and with greater intensity.

B. Electronic Security. But let me turn now to other types of risk banks may face in the future as retail banking becomes a more electronic business. In the past, banks provided retail banking services through brick-and-mortar branch networks, that each individual bank owned and operated. Looking ahead, banking products will

increasingly be delivered through shared, electronic networks such as the ATM networks or the Internet. Electronic information security will become increasingly important, as will the legal rights and obligations of consumers and banks when that security fails, and consumers face the potential for financial loss, or the loss of privacy they had expected their banks to maintain for them. The fundamental issue is how will banks give their legitimate, retail customers remote, electronic access to their banking products, while keeping hackers and "electronic bank robbers" out of their systems?

Let me try to answer that question with a brief, but I hope provocative, discussion of electronic security using the Internet as a model. A large number of banks in the United States have established web-sites on the Internet. Thus far, most of these web-sites are intended to distribute general information about the bank and advertise banking products. This limited type of electronic banking is fairly risk free (except for the possibility of reputational risk if a hacker breaks in and changes the general information) because the information on the web-site is not linked to the bank's internal computer systems that hold the actual account information and other information assets of the banks. A few banks, however, have already established what are called "fully transactional web sites" for retail banking, and many more are planning to do so in the near future, not only for their customers in the United States, but in at least one case for customers around the world. Using these more advanced web sites, consumers can obtain account information, transfer funds among accounts, file applications, make payments, and perform other banking operations.

The risks, I am sure most of you would agree, will increase considerably with these "transactional web sites" because these web sites provide a path to a bank's internal network and the computers holding the account information and other information assets of the bank, and banks must construct barriers, or firewalls, to protect the data internally and from outside hackers. They also need to develop ways for keeping the information secure as it travels over the Internet so that it cannot be intercepted, read, and altered. Finally, bankers must put in place the technology to make sure a hacker does not assume the identity of one of their customers. Passwords and encryption technology may be sufficient to overcome these problems on an open network such as the Internet, but we still do not have enough experience in the United States for me to be able to tell you with confidence that this technology will be adequate. Banks will still need to deal with those cases in which consumers inadvertently disclose their passwords or lose their electronic access cards.

At the Federal Reserve Bank of New York, we have been working hard on electronic security. We hosted a conference sponsored by a private sector group (Payments Risk Committee) on electronic security, and our Bank Supervision Group held a conference identifying "best practices" in the banking industry. If you give me your business card at the end of this session, I would be happy to arrange for you to receive copies of the material created for these two programs or visit our web-site at www.newyorkfed.org. But first, we still have two more types of risk to consider.

C. Banks as Certification Authorities for Electronic Commerce. Electronic commerce more generally could create new business opportunities and risks for banks. Some banks feel that it is important to maintain their role as the trusted third party that enable payments to be made. In electronic commerce, however, this role for banks, if they do not want nonbank competitors to step in and fill the void, might need to be extended to include providing a certification-authority service, that is, guaranteeing the identities of the counter parties involved in business transactions through the issuance of digital certificates.

We need to think carefully about the risks and liabilities banks might face if they offered this service and a fraudster managed to establish a false identity. Allow me to list a few of the issues that come immediately to mind: (1) would the bank, acting as the certification authority, be liable for any financial loss or loss of private information that the legitimate counter party suffered, (2) could the bank effectively measure and then manage the risks created by these potential liabilities by purchasing appropriate insurance policies, (3) would the application for an identity guaranteed by a bank need to be reviewed and scored in much the same way a bank makes a loan, (4) should the bank be required to make a disclosure stating how much liability it would be willing to assume for each identity it had guaranteed for electronic commerce so that potential counter parties could make informed decisions about whether to transact, (5) as is the case now with credit cards, would the banks need to continuously monitor the use of the digital certificate to identify any unusual usage patterns, and (6) how rapidly and through which channels would a bank cancel digital certificates fraudulently obtained or used in inappropriate ways.

I also believe that this issue of "certification" needs to be examined from the perspective of the consumer as well. If a consumer finds attractive product offerings at the Web-site of an unfamiliar Internet bank, how can the consumer check on whether this bank has a charter in the consumer's home country and is supervised by appropriate authorities? Should the consumer be able to go to a reputable third party such as the Bank of Japan or the Federal Reserve to obtain such information? The recent "failure" of the Antigua-based "European Union Bank" suggests to me that these are very relevant questions, and banking authorities could well face some thorny issues of jurisdiction in the future when dealing with problem institutions.

In general, the prospects for an active electronic market place, with banks perhaps playing a pivotal role in the processing of the associated payments, raises some important risk issues that, in my mind at least, are not fully resolved. Nonetheless, my experience with large-value payment systems tells me that these new types of risks in retail payment systems and electronic commerce more generally will be managed more effectively over time as participants, bankers, and supervisors all gain more experience with electronic, retail banking.

D. Onerous Regulation. Perhaps we should take just a few moments to think about regulation because there is an element of risk here for banks as well. In the new world of remote, electronic banking, consumers will expect access to their banks 24 hours a day, 365 days a year. Moreover, consumers making electronic payments may begin to postpone some payments to the last minute because they view electronic payments as virtually instantaneous. What would happen if a retail, electronic payment system failed to operate and many consumers were a few days late with their routine monthly payments as a result? Who would be responsible for the resulting late-payment penalties, which in the case of home-mortgage payments, could be quite substantial?

For our large-value systems, we make every effort to minimize the probability that a shutdown would ever occur. Are retail systems worth the same effort? Before we consider answering "no" to this question because the aggregate monetary value is smaller and the consequences are not likely to be systemic in nature, we should recall that individual consumers are also voters, and the result of an electronic retail payment system failure could be additional regulation for the banking system.

Thus far, the regulatory authorities in the United States (including President Clinton in a recent memorandum to the heads of government agencies) have taken the approach of allowing electronic commerce to develop without Federal regulatory interference if state laws are adequate. Basically, the approach has been to maintain a "level playing field," that is, not to impose any regulations, taxes, or tariffs on electronic commerce that are not already in place for conventional commerce. It is believed that self-regulation by the industry will be superior to regulation imposed by the government. For bankers, this laissez-faire regulatory approach means that the new electronic banking and payment systems for their retail customers must attain very high levels of confidentiality, availability and integrity, or possibly run the risk of onerous regulation that results from the political backlash following a major problem in an electronic retail payment system -- a very important possibility, indeed, for bankers to ponder as they begin to move retail banking into a more electronic environment. Let me make it clear that, assuming little need for regulation arises, bank supervisors will continue their oversight of banks' retail payment systems to help ensure that these systems are operated in a safe and sound manner.

Conclusions.

We have now finished the section on risk and have covered, what I feel are, the three important topics for retail banking going forward: (1) technology, (2) competition, and (3) risk. I would like to leave you with a few concluding remarks.

Retail banking in the United States appears poised for some rather dramatic change, and indeed to some extent that change is already underway. As I said at the beginning of my remarks, I have attempted to give you an overview of my current and somewhat speculative thinking on this subject, but my thinking too is likely to change over time as retail banking moves to a more electronic business, an evolutionary process that could well take some unexpected twists and turns because it is essentially being driven by technological innovation. Nonetheless, it does appear to me that, whatever the exact outcome, bankers will face important competitive challenges and risks in the future, and I believe now is the time to start thinking about how to meet the competition and manage those risks, both from the perspective of individual institutions as well as the banking industry as a whole.

Thank you.
